

2024

LS500

OWNER'S MANUAL

WARNING: Operating, servicing and maintaining a passenger vehicle or off-highway motor vehicle can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle. For more information go to www.P65Warnings.ca.gov/passenger-vehicle.

Your Lexus dealer

Your Lexus dealer will provide quality maintenance and any other assistance you may require.
If there is not a Lexus dealer near you, please call the following number:

U.S. OWNERS

- In the U.S. mainland or Canada:
  Lexus Roadside Assistance
  1-800-25-LEXUS or 1-800-255-3987 (Toll-Free)
- In Hawaii:
  Servco Automotive Roadside Assistance/Customer Services
  1-800-25-LEXUS or 1-800-255-3987 (Toll-Free)

CANADIAN OWNERS

- In Canada or the U.S. mainland:
  Lexus Roadside Assistance/Customer Service
  1-800-26-LEXUS or 1-800-265-3987 (Toll-Free)

Please access our **websites** for further information.

- The U.S. mainland: www.lexus.com
- Hawaii: www.servcolexus.com
- Canada : www.lexus.ca

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For your information

Main Owner's Manual

Please note that this manual applies to all models and explains all equipment, including options. Therefore, you may find explanations for equipment not installed on your vehicle and the illustrations used may differ from your vehicle.

All specifications provided in this manual are current at the time of printing. Over time, your vehicle may receive updates that modify the vehicle and make material in this manual incomplete and/or inaccurate. Because of Lexus' interest in continual product improvement, Lexus reserves the right to make changes to this manual at any time without notice.

If Lexus chooses to update the manual, updated versions can be viewed by selecting your vehicle by model and year at the following URL or on your mobile device if you have access to the Lexus app.

https://drivers.lexus.com

Noise from under vehicle after turning off the engine

Approximately five hours after the engine is turned off, you may hear sound coming from under the vehicle for several minutes. This is the sound of a fuel evaporation leakage check and, it does not indicate a malfunction.

Accessories, spare parts and modification of your Lexus

A wide variety of non-genuine spare parts and accessories for Lexus vehicles are currently available in the market. You should know that Toyota does not warrant these products and is not responsible for their performance, repair, or replacement, or for any damage they may cause to, or adverse effect they may have on, your Lexus vehicle.

This vehicle should not be modified with non-genuine Lexus products. Modification with non-genuine Lexus products could affect its performance, safety or durability, and may even violate governmental regulations. In addition, damage or performance problems resulting from the modification may not be covered under warranty.

Also, remodeling like this will have an effect on advanced safety equipment such as Lexus Safety System + 3 and there is a danger that it will not work properly or the danger that it may work in situations where it should not be working.

Cyber Attack Risk

Installing electronic devices and radios increases the risk of cyber attacks through the installed parts, which may lead to unexpected accidents and leakage of personal information. Lexus does not make any guarantees for

problems caused by installing non-genuine Lexus products.

Installation of a mobile two-way radio system

The installation of a mobile two-way radio system in your vehicle could affect electronic systems such as:

- Multiport fuel injection system/sequential multiport fuel injection system
- Lexus Safety System + 3
- Anti-lock brake system
- Vehicle dynamics integrated management
- SRS airbag system
- Seat belt pretensioner system

Be sure to check with your Lexus dealer for precautionary measures or special instructions regarding installation of a mobile two-way radio system.

Vehicle data recording

This vehicle is equipped with sophisticated computers that record certain data regarding vehicle controls and operations.

Data recorded by the computers*1

*1: The recorded data varies according to the vehicle grade level and options with which it is equipped.

Certain data, such as the following, is recorded depending on the operation timing and status of each function.

- Basic vehicle behavior related data (engine speed, accelerator/brake pedal operation, vehicle speed, etc.)
- Operating state of the driving support systems (recorded during system operation, includes basic vehicle behavior related data)
- Driving support system sensor data
- Image data (images from the front, rear, vehicle periphery, and driver monitor cameras)*2

*2: The vehicle has multiple cameras. For details on from which cameras images are recorded, contact your Lexus dealer.

- Location information

These computers do not record conversations, sounds, or images of the inside of the vehicle.

Also, personal information which may be used to identify the owner of the vehicle (name, gender, age, etc.) is not recorded.

Usage of recorded data and personal information by the Lexus Safety System + 3

The operating state of each system, data from each sensor, image data (images from the front/rear cameras), and position information is recorded by the Lexus Safety System + 3 in the following situations. Toyota obtains this information when the vehicle is brought to the dealership or when sent to the Toyota servers.

- In certain collisions or collision-like situations
- When driving on roads with certain traffic situations, such as congestion, poor road surfaces, poor weather,

etc.

- When driving on certain roads, such as roads which were recently opened or extended
- After the engine is started, for a certain amount of time

To learn more about the vehicle data collected, used and shared by Lexus, please visit http://www.lexus.com/privacyvts/.

■ Data provision and use purpose by third parties

Data recorded by the computers may be used for collision analysis, malfunction diagnosis, automated driving, advanced safety and map related technologies (technology, product development, product improvement, etc.) and products and services which use data (maps used for automated driving and advanced safety technologies, driving condition analysis, analysis of the driving environment, such as road infrastructure, traffic condition communication, etc. Herein referred to as "individual services".) Also, this data may be used for customer support related to a collision, collision analysis or resolution.

In situations such as the following, Toyota may disclose the recorded data to a third party:

- When the consent of the vehicle owner (or the lessee if the vehicle is leased) has been given
- When officially requested by the police, a court of law or a government agency
- When it is to be used by Toyota in a lawsuit
- When data is to be used research purposes after processing so that the data is not tied to a specific vehicle or vehicle owner

In addition to the above, Toyota may disclose the data recorded by the Lexus Safety System + 3 to a third party in the following situations:

- When separate consent of the vehicle owner (or the lessee if the vehicle is leased) has been given. This includes situations when the user subscribes to an individual service which is provided by a second party and uses vehicle recorded data, where the provider has obtained the user's consent for providing data to a third-party
- When providing data to a company involved in autonomous driving software, etc. for the purpose of research and development (technology, product development, product improvement, etc.) of automated driving, advanced safety and map related technologies
- When providing image data and position information to a company involved in map creation, etc. for the purpose of research and development map related technologies
- When providing image data and position information to a local government for the purpose of road maintenance, etc.
- When providing processed image data and position information to

traffic condition communication individual services

- When providing image data from near a fire, or other area that emergency services are dispatched, to the fire department of a local government which has entered a separate contract with Lexus

Image information recorded by the vehicle can be erased by your Lexus dealer.

The image recording function can be disabled. However, if the function is disabled, data from when systems operate will not be available.

If you wish to stop the collection of Lexus Safety System + 3 data by the Toyota servers for the purpose of research and development and provision to individual services, contact your Lexus dealer.

Usage of data collected through Connected Services (U.S.mainland only)

If your Lexus has Connected Services and if you have subscribed to those services, please refer to the Connected Services Telematics Subscription Service Agreement for information on data collected and its usage.

To learn more about the vehicle data collected, used and shared by Lexus, please visit www.lexus.com/privacyvts/.

Statement on Warranty Coverage for Aftermarket and Recycled Parts (For U.S. Owners)

The Magnuson-Moss Warranty Act, 15 U.S.C. s.2301 et seq., makes it illegal for motor vehicle manufacturers to void a motor vehicle warranty or deny warranty coverage solely because an aftermarket or recycled part has been used to repair the vehicle or someone other than the authorized service provider performed service on the vehicle. This provision does not apply to a new motor vehicle purchased solely for commercial or industrial use.

Under federal law, a manufacturer may deny warranty coverage and charge for repairs to a vehicle if it is discovered that an aftermarket or recycled part installed on the vehicle is defective or was installed incorrectly and caused damage to another part of the vehicle otherwise covered under warranty. The Federal Trade Commission requires that a manufacturer demonstrate that an aftermarket or recycled part or service performed by a person other than an authorized service provider caused damage to another part of the vehicle otherwise covered under warranty before denying warranty coverage. Additionally, federal law allows a manufacturer to void a motor vehicle warranty or deny warranty coverage if the manufacturer provides the article or service to consumers free of charge under the warranty or the manufacturer has secured a waiver from the Federal Trade Commission.

Event data recorder

This vehicle is equipped with an event data recorder (EDR). The main pur-

pose of an EDR is to record, in certain crash or near crash-like situations, such as an air bag deployment or hitting a road obstacle, data that will assist in understanding how a vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less.

The EDR in this vehicle is designed to record such data as:

- How various systems in your vehicle were operating;
- Whether or not the driver and passenger safety belts were buckled/fastened;
- How far (if at all) the driver was depressing the accelerator and/or brake pedal; and,
- How fast the vehicle was traveling.

These data can help provide a better understanding of the circumstances in which crashes and injuries occur.

NOTE: EDR data are recorded by your vehicle only if a non-trivial crash situation occurs; no data are recorded by the EDR under normal driving conditions and no personal data (e.g., name, gender, age, and crash location) are recorded. However, other parties, such as law enforcement, could combine the EDR data with the type of personally identifying data routinely acquired during a crash investigation.
To read data recorded by an EDR, special equipment is required, and access to the vehicle or the EDR is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have the special equipment, can read the information if they have access to the vehicle or the EDR.

● Disclosure of the EDR data

Lexus will not disclose the data recorded in an EDR to a third party except when:

- An agreement from the vehicle's owner (or the lessee for a leased vehicle) is obtained
- In response to an official request by the police, a court of law or a government agency
- For use by Lexus in a lawsuit

However, if necessary, Lexus may:

- Use the data for research on vehicle safety performance
- Disclose the data to a third party for research purposes without disclosing information about the specific vehicle or vehicle owner

Scrapping of your Lexus

The SRS airbag, seat belt pretensioner devices and Pop Up Hood system in your Lexus contain explosive chemicals. If the vehicle is scrapped with the airbags, seat belt pretensioners and Pop Up Hood micro gas generators left as they are, this may cause an accident such as fire. Be sure to have the systems of the SRS airbag, seat belt pretensioner and Pop Up Hood micro gas generators removed and disposed of by a qualified service shop or by your Lexus dealer before you scrap your vehicle.

Perchlorate Material

Special handling may apply, See www.dtsc.ca.gov/hazardouswaste/perchlorate.

Your vehicle has components that may contain perchlorate. These components may include the airbags, seat belt pretensioners, Pop Up Hood system, wireless remote control batteries, and the batteries in the tire pressure warning valve and transmitters.

"QR Code"

The word "QR Code" is registered trademark of DENSO WAVE INCORPORATED in Japan and other countries.

WARNING

■ General precautions while driving

Driving under the influence: Never drive your vehicle when under the influence of alcohol or drugs that have impaired your ability to operate your vehicle. Alcohol and certain drugs delay reaction time, impair judgment and reduce coordination, which could lead to an accident that could result in death or serious injury.

Defensive driving: Always drive defensively. Anticipate mistakes that other drivers or pedestrians might make and be ready to avoid accidents.

Driver distraction: Always give your full attention to driving. Anything that distracts the driver, such as adjusting controls, talking on a cellular phone or reading can result in a collision with resulting death or serious injury to you, your occupants or others.

■ General precaution regarding children's safety

Never leave children unattended in the vehicle, and never allow children to have or use the key.

Children may be able to start the vehicle or shift the vehicle into neutral. There is also a danger that children may injure themselves by playing with the windows, the moon roof, or other features of the vehicle. In addition, heat build-up or extremely cold temperatures inside the vehicle can be fatal to children.

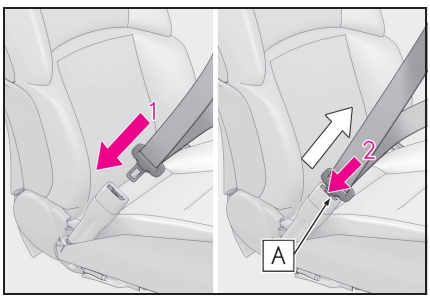
Reading this manual

Explains symbols used in this manual.

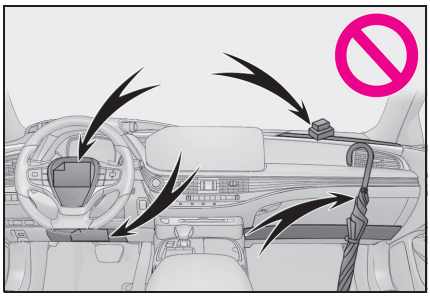
Symbols in this manual

Symbols	Meanings
	WARNING: Explains something that, if not obeyed, could cause death or serious injury to people.
	NOTICE: Explains something that, if not obeyed, could cause damage to or a malfunction in the vehicle or its equipment.
	Indicates operating or working procedures. Follow the steps in numerical order.

Symbols in illustrations



Symbols	Meanings
	Indicates the action (pushing, turning, etc.) used to operate switches and other devices.
	Indicates the outcome of an operation (e.g. a lid opens).

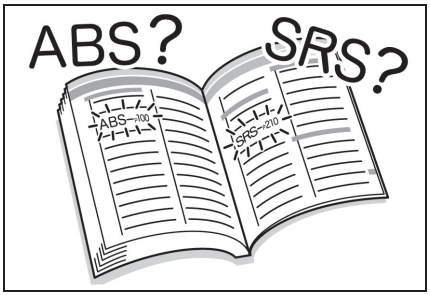


Symbols	Meanings
	Indicates the component or position being explained.
	Means **Do not**, **Do not do this**, or **Do not let this happen**.

How to search

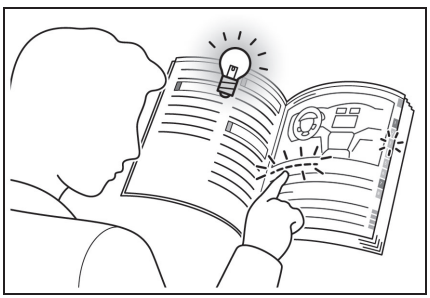
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Searching by installation position

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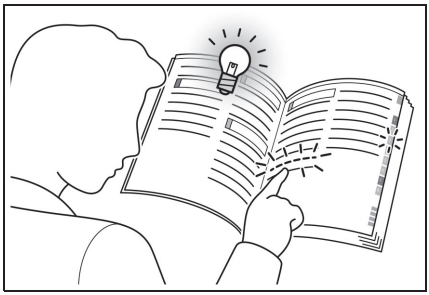
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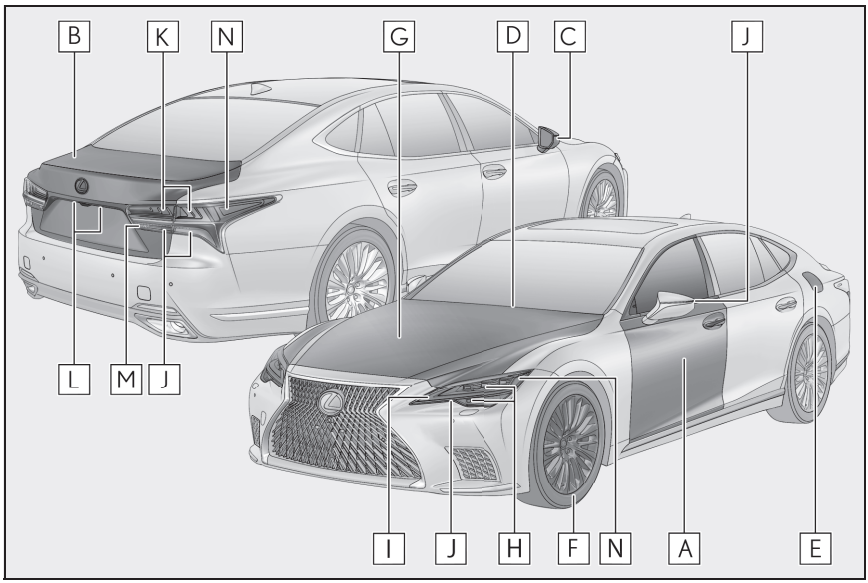
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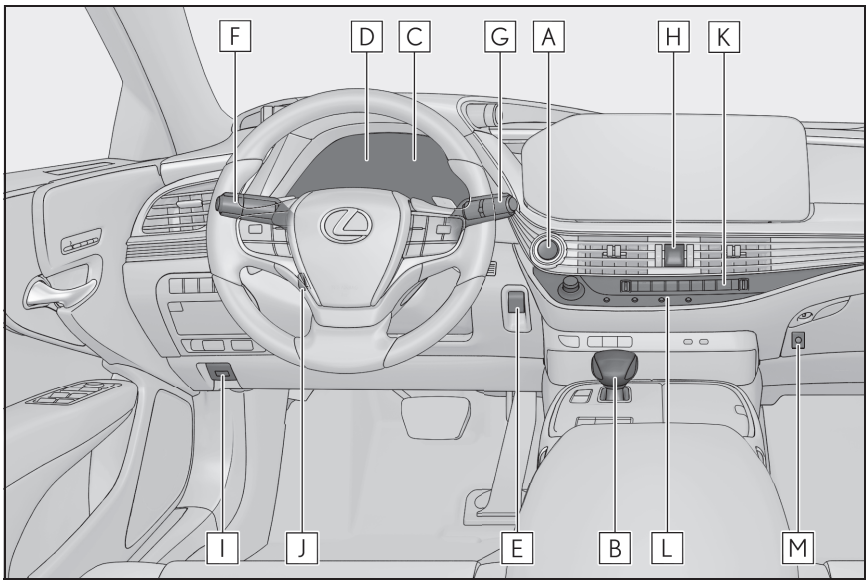
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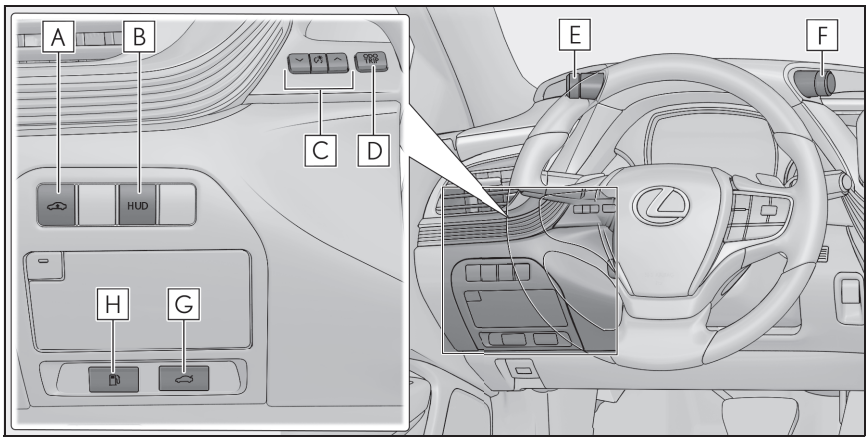
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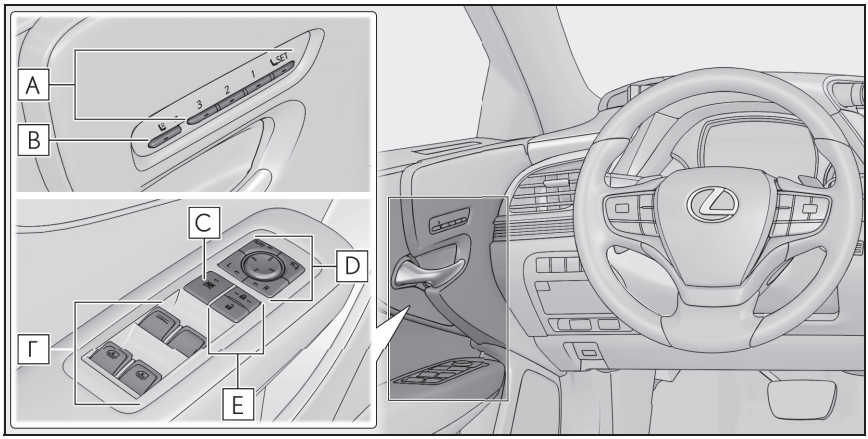
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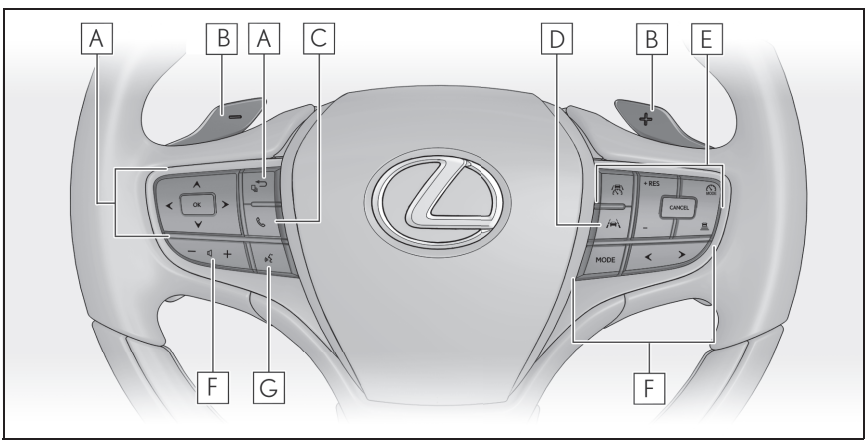
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*: If equipped



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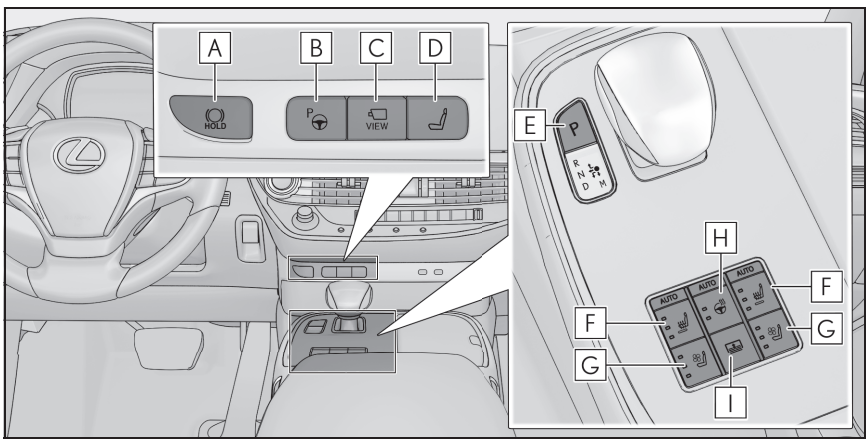
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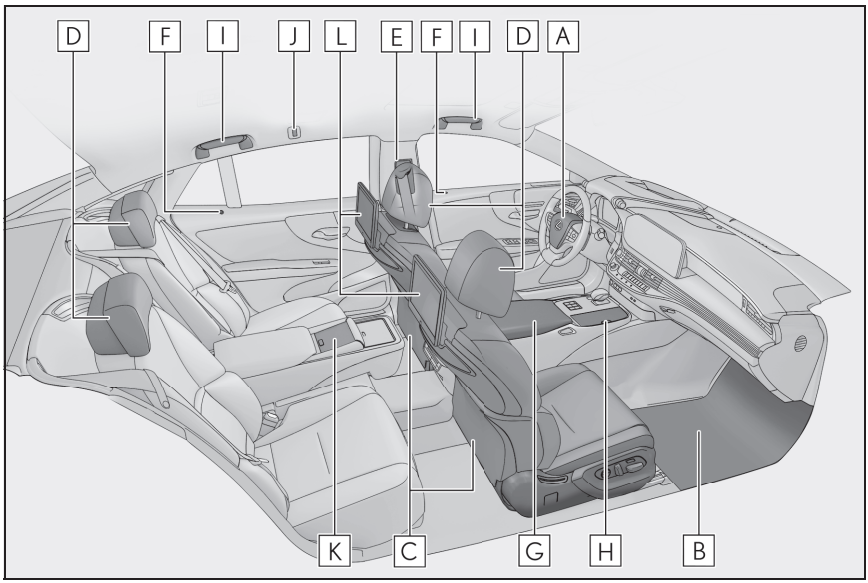
H Heated steering wheel switch*2 ..... P.357

I Rear sunshade switch P.383

*1: Refer to "MULTIMEDIA OWNER'S MANUAL".

*2: If equipped

Interior

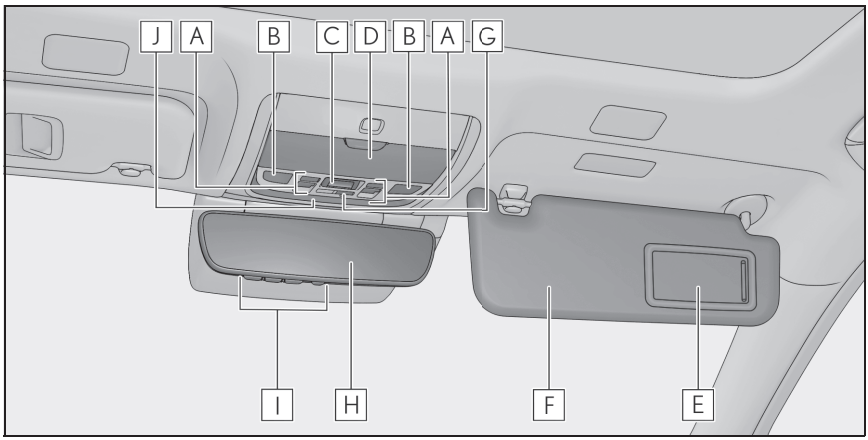


A SRS airbags P.30
B Floor mats P.24
C Front seats P.113
D Head restraints P.129
E Seat belts P.26
F Inside lock buttons P.99
G Console box P.366
H Cup holders P.365
I Assist grips P.379
J Coat hooks P.379
K Rear Multi Operation Panel*1 ..... P.340
L Rear seat entertainment system*1, 2

*1: If equipped

*2: Refer to "MULTIMEDIA OWNER'S MANUAL".

■Ceiling



A Moon roof switches* P.149
Panoramic moon roof switches* P.151
B Personal lights P.361
C "SOS" button* P.57
D Auxiliary box P.367
E Vanity mirrors P.381
F Sun visors P.381
G Door-linked interior light switch P.361
H Inside rear view mirror* P.134
Digital Rearview Mirror* P.135
I Garage door opener buttons P.385
J Interior light P.360

*: If equipped

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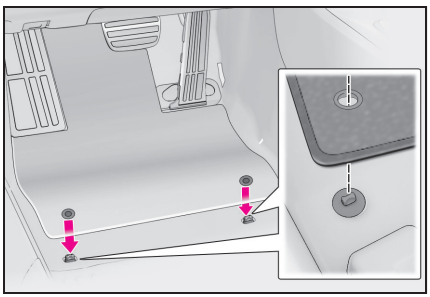
Before driving

Observe the following before starting off in the vehicle to ensure safety of driving.

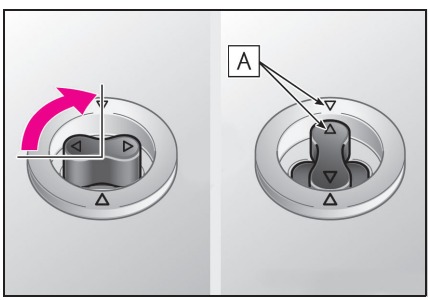
Installing floor mats

Use only floor mats designed specifically for vehicles of the same model and model year as your vehicle. Fix them securely in place onto the carpet.

1 Insert the retaining hooks (clips) into the floor mat eyelets.



2 Turn the upper knob of each retaining hook (clip) to secure the floor mats in place.



Always align the △ marks **A**.

The shape of the retaining hooks (clips) may differ from that shown in the illustration.

WARNING

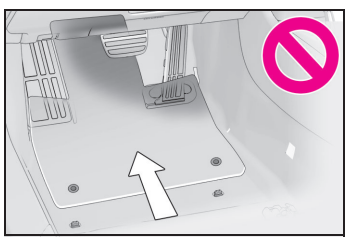
Observe the following precautions. Failure to do so may cause the driver's floor mat to slip, possibly interfering with the pedals while driving. An unexpectedly high speed may result or it may become difficult to stop the vehicle. This could lead to an accident, resulting in death or serious injury.

■ When installing the driver's floor mat

- Do not use floor mats designed for other models or different model year vehicles, even if they are Lexus Genuine floor mats.
- Only use floor mats designed for the driver's seat.
- Always install the floor mat securely using the retaining hooks (clips) provided.
- Do not use two or more floor mats on top of each other.
- Do not place the floor mat bottom-side up or upside-down.

■ Before driving

- Check that the floor mat is securely fixed in the correct place with all the provided retaining hooks (clips). Be especially careful to perform this check after cleaning the floor.

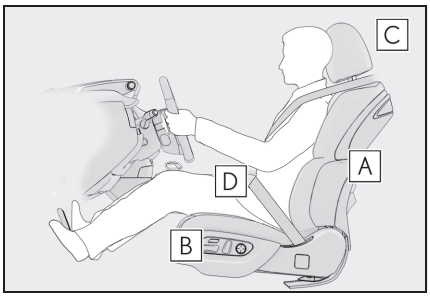


- With the engine stopped and the shift position in P, fully depress each pedal to the floor to make sure it does not interfere with the floor mat.

For safe driving

For safe driving, adjust the seat and mirror to an appropriate position before driving.

Correct driving posture



A Adjust the angle of the seatback so that you are sitting straight up and so that you do not have to lean forward to steer. (→P.113)

B Adjust the seat so that you can depress the pedals fully and so that your arms bend slightly at the elbow when gripping the steering wheel. (→P.113)

C Lock the head restraint in place with the center of the head restraint closest to the top of your ears. (→P.129)

D Wear the seat belt correctly. (→P.26)

WARNING

■ For safe driving

Observe the following precautions. Failure to do so may result in death or serious injury.

- Do not adjust the position of the driver's seat while driving.
  Doing so could cause the driver to lose control of the vehicle.
- Do not place a cushion between the driver or passenger and the seatback.
  A cushion may prevent correct posture from being achieved, and reduce the effectiveness of the seat belt and head restraint.
- Do not place anything under the front seats.
  Objects placed under the front seats may become jammed in the seat tracks and stop the seat from locking in place. This may lead to an accident and the adjustment mechanism may also be damaged.
- Always observe the legal speed limit when driving on public roads.
- When driving over long distances, take regular breaks before you start to feel tired.
  Also, if you feel tired or sleepy while driving, do not force yourself to continue driving and take a break immediately.

Correct use of the seat belts

Make sure that all occupants are wearing their seat belts before driving the vehicle. (→P.26)
Use a child restraint system appropriate for the child until the child becomes large enough to properly wear the vehicle's seat belt. (→P.44)

Adjusting the mirrors

Make sure that you can see backward clearly by adjusting the inside and outside rear view mirrors properly. (→P.134, 135, 143)

Seat belts

Make sure that all occupants are wearing their seat belts before driving the vehicle.

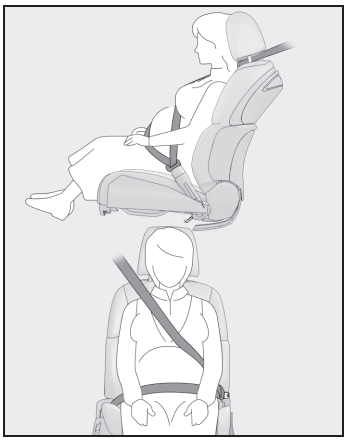
⚠ WARNING

Observe the following precautions to reduce the risk of injury in the event of sudden braking, sudden swerving or an accident.
Failure to do so may cause death or serious injury.

■ Wearing a seat belt

- Ensure that all passengers wear a seat belt.
- Always wear a seat belt properly.
- Each seat belt should be used by one person only. Do not use a seat belt for more than one person at once, including children.
- Lexus recommends that children be seated in the rear seat and always use a seat belt and/or an appropriate child restraint system.
- To achieve a proper seating position, do not recline the seat more than necessary. The seat belt is most effective when the occupants are sitting up straight and well back in the seats.
- Do not wear the shoulder belt under your arm.
- Always wear your seat belt low and snug across your hips.

■ Pregnant women



Obtain medical advice and wear the seat belt in the proper way. (→P.27)

Women who are pregnant should position the lap belt as low as possible over the hips in the same manner as other occupants, extending the shoulder belt completely over the shoulder and avoiding belt contact with the rounding of the abdominal area.

If the seat belt is not worn properly, not only the pregnant woman, but also the fetus could suffer death or serious injury as a result of sudden braking or a collision.

■ People suffering illness

Obtain medical advice and wear the seat belt in the proper way. (→P.27)

■ When children are in the vehicle

→P.52

■ Seat belt damage and wear

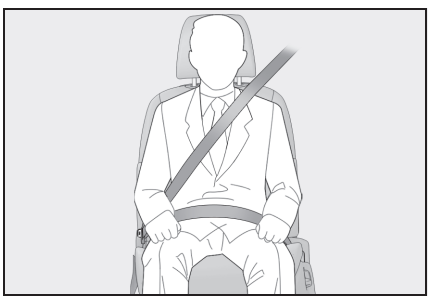
- Do not damage the seat belts by allowing the belt, plate, or buckle to be jammed in the door.

WARNING

- Inspect the seat belt system periodically. Check for cuts, fraying, and loose parts. Do not use a damaged seat belt until it is replaced. Damaged seat belts cannot protect an occupant from death or serious injury.
- Ensure that the belt and plate are locked and the belt is not twisted. If the seat belt does not function correctly, immediately contact your Lexus dealer.
- Replace the seat assembly, including the belts, if your vehicle has been involved in a serious accident, even if there is no obvious damage.
- Do not attempt to install, remove, modify, disassemble or dispose of the seat belts. Have any necessary repairs carried out by your Lexus dealer. Inappropriate handling may lead to incorrect operation.

Correct use of the seat belts

- Extend the shoulder belt so that it comes fully over the shoulder, but does not come into contact with the neck or slide off the shoulder.



- Position the lap belt as low as possible over the hips.
- Adjust the position of the seatback. Sit up straight and well back in the seat.
- Do not twist the seat belt.

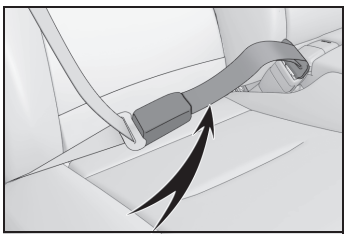
Child seat belt usage

The seat belts of your vehicle were principally designed for persons of adult size.

- Use a child restraint system appropriate for the child, until the child becomes large enough to properly wear the vehicle's seat belt. (→P.44)
- When the child becomes large enough to properly wear the vehicle's seat belt, follow the instructions regarding seat belt usage. (→P.26)

Seat belt extender

If your seat belts cannot be fastened securely because they are not long enough, a personalized seat belt extender is available from your Lexus dealer free of charge.



WARNING

Using a seat belt extender

Observe the following precautions to reduce the risk of injury in the event of sudden braking, sudden swerving or an accident.
Failure to do so may cause death or serious injury.

- Do not wear the seat belt extender if you can fasten the seat belt without the extender.
- Do not use the seat belt extender when installing a child restraint system because the belt will not securely hold the child restraint system, increasing the risk of death or serious injury in the event of an accident.

WARNING

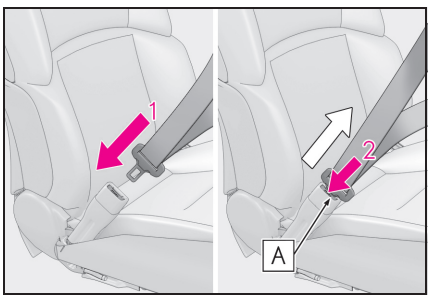
- The personalized extender may not be safe on another vehicle, when used by another person, or at a different seating position other than the one originally intended.

NOTICE

■ When using a seat belt extender

When releasing the seat belt, press on the buckle release button on the extender, not on the seat belt.
This helps prevent damage to the vehicle interior and the extender itself.

Fastening and releasing the seat belt



1 To fasten the seat belt, push the plate into the buckle until a click sound is heard.

2 To release the seat belt, press the release button [A].

If the seat belt cannot be pulled out of the retractor, firmly pull the belt and release it.

■ Emergency locking retractor (ELR)

The retractor will lock the belt during a sudden stop or on impact. It may also lock if you lean forward too quickly. A slow, easy motion will allow the belt to extend so that you can move around fully.

■ Automatic locking retractor (ALR)

When a passenger's shoulder belt is completely extended and then retracted even slightly, the belt is locked in that position and cannot be extended. This feature is used to hold the child restraint system (CRS) firmly. To free the belt again, fully retract the belt and then pull the belt out once more. (→P.44)

Easy Access Buckle (front seats)*

The front seat belt buckles move outward automatically for easier access.

▶ When entering the vehicle

When a front door is opened, the seat belt buckle for the corresponding seat will move outward automatically. The buckle will retract automatically after the plate is inserted and locked to the buckle.

▶ When exiting the vehicle (driver's seat only)

If the engine switch is turned off when the driver's seat belt is fastened, the driver's seat belt buckle will move outward. The buckle will retract automatically when the driver's seat belt is released.

*: If equipped

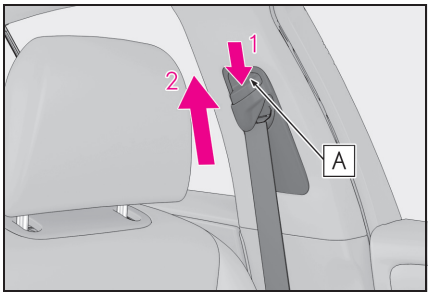
■ Easy Access Buckle

- When the seat belt buckle is in the outward position and not latched, if the front passenger's seat is not occupied and the vehicle is driven, the seat belt buckle will return to its original position.
- If an occupant exits the vehicle and leaves the front door open and then enters the vehicle again, the seat belt buckle will not operate until the door is closed and then opened again.

■ Customization

Some functions can be customized.
(→P.510)

Adjusting the seat belt shoulder anchor height (front seats)



1 Push the seat belt shoulder anchor down while pressing the release button A.

2 Push the seat belt shoulder anchor up while pressing the release button A.

Move the height adjuster up and down as needed until you hear a click.

WARNING

■ Adjustable shoulder anchor

Always make sure the shoulder belt is positioned across the center of your shoulder. The belt should be kept away from your neck, but not falling off your shoulder. Failure to do so could reduce the amount of protection in an accident and cause death or serious injuries in the event of a sudden stop, sudden swerve or accident.

Seat belt pretensioners

When the vehicle is subjected to a severe frontal or side impact or rollover, the pretensioners retract the seat belts of the front seats and rear outer seats to securely restrain the occupants.

The pretensioners will not operate in minor frontal or side impacts, or rear impacts.

■ Replacing the belt after the pretensioner has been activated

If the vehicle is involved in multiple collisions, the pretensioner will activate for the first collision, but will not activate for the second or subsequent collisions.

WARNING

■ Seat belt pretensioners

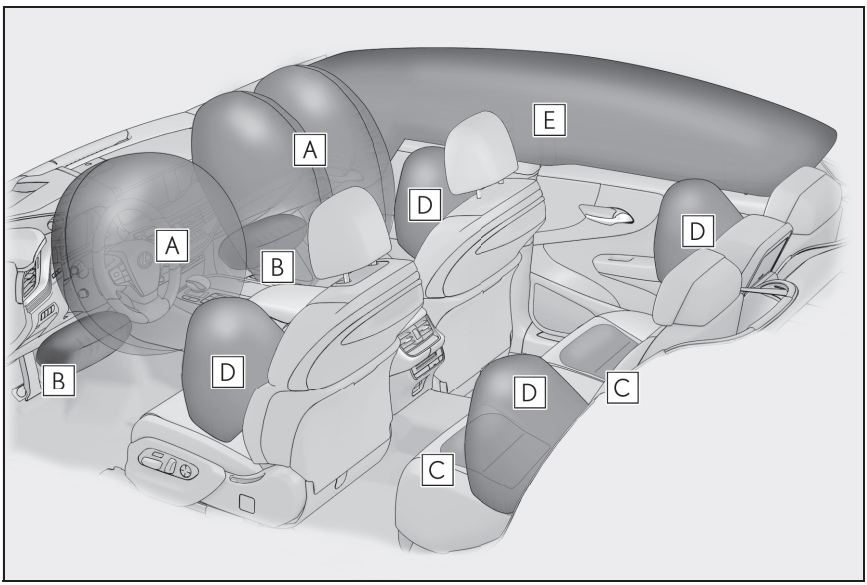
Observe the following precautions to reduce the risk of injury in the event of sudden braking or an accident. Failure to do so may result in death or serious injury.

- Do not place anything, such as a cushion, on the front passenger's seat. Doing so will disperse the passenger's weight, which prevents the sensor from detecting the passenger's weight properly. As a result, the seat belt pretensioner for the front passenger's seat may not operate in the event of a collision.
- If a pretensioner has operated, the SRS warning light will illuminate. In this situation, the seat belt cannot be used and must be replaced by your Lexus dealer.

SRS airbags

The SRS airbags deploy when the vehicle is subjected to certain types of severe impact that may cause significant injury to the occupants. The airbags work together with the seat belts to help reduce the risk of death or serious injury.

SRS airbag system



A SRS driver airbag/front passenger airbag

Help reduce impact to the head and chest of the driver and front passenger

B SRS knee airbag

Help reduce impact to the driver and front passenger

C SRS seat cushion airbags (if equipped)

- Help restrain the occupants of the rear outer seats

D SRS side airbags

- Help reduce impact to the chest of the occupants of the front seats
- Help reduce impact to the chest of the occupants of the rear outer seats

E SRS curtain shield airbags

- Help reduce impact to the heads of the occupants of the front and rear outer seats
- Can help prevent the occupants from being thrown from the vehicle in the event of a vehicle rollover

Your vehicle is equipped with ADVANCED AIRBAGS designed based on US motor vehicle safety standards (FMVSS208). The airbag sensor assembly (ECU) controls airbag deployment based on information obtained from the sensors, etc., shown in the system components diagram above. This information includes crash severity and occupant information. As the airbags deploy, a chemical reaction in the inflators quickly fills the airbags with non-toxic gas to help restrain the motion of the occupants.

If the SRS airbags deploy (inflate)

- Slight abrasions, burns, bruising, etc., may be sustained from SRS airbags, due to the extremely high speed of deployment (inflation) by hot gases.
- A loud noise and white powder will be emitted.
- Parts of the airbag module (steering wheel hub, airbag cover and inflator) as well as the parts around the airbags may be hot for several minutes. The airbag itself may also be hot.
- The windshield may crack.
- All of the doors will be unlocked. (→P.97)
- The brakes and stop lights will be controlled automatically. (→P.330)
- The interior lights will turn on automatically. (→P.362)
- The emergency flashers will turn on automatically. (→P.448)
- Fuel supply to the engine will be stopped. (→P.456)
- For Safety Connect subscribers, if any of the following situations occur, the system is designed to send an emergency call to the response center, notifying them of the vehicle's location (without needing to push the "SOS" button) and an agent will attempt to speak with the occupants to ascertain the level of emergency and assistance required. If the occupants are unable to communicate, the agent automatically treats the call as an emergency and helps to dispatch the necessary emergency services. (→P.57)
  - When an SRS airbag has been deployed
  - When a seat belt pretensioner has operated
  - When the vehicle has been involved in a severe rear-end collision

PCS-linked control

If the PCS (Pre-Collision System) determines that the possibility of a side collision is high, the SRS side and curtain shield airbags will be prepared to operate.

The SRS airbags deploy in a frontal impact when

- The following SRS airbags will deploy in the event of an impact that exceeds a threshold level (level of force corresponding to an approximately 12 - 18 mph [20 - 30 km/h] frontal collision with a fixed wall that does not move or deform):
  - SRS front airbags
- The threshold level at which the SRS airbags will deploy will be higher than normal in the in the following situations:
  - When the vehicle collides with an object, such as a parked vehicle or sign pole, which moves or deforms on impact
  - If the vehicle is involved in an underride collision, such as a collision in which the front of the vehicle "underrides", or goes under, the bed of a truck
- Depending on the type of collision, only the following may deploy:
  - Seat belt pretensioners
- The SRS airbags for the front passenger's seat will not deploy if there is no passenger in the front passenger seat. However, the SRS airbags for the front passenger's seat may deploy, even if the seat is unoccupied, if luggage is put on the seat.
- Vehicles with SRS seat cushion airbags: The SRS seat cushion airbags for the rear outer seats will not deploy if the seat belt of an occupied seat is unfastened.
- In the event of an especially severe frontal

collision, the left and right SRS curtain shield airbags may also deploy.

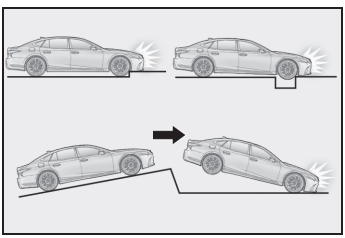
■ **The SRS airbags deploy in a side impact when**

● The following SRS airbags will deploy in the event of an impact that exceeds the set threshold level (level of force corresponding to the impact force produced by an approximately 3300 lb. [1500 kg] vehicle colliding with the passenger compartment at a perpendicular angle at an approximate speed of 12 - 18 mph [20 - 30 km/h]):
- SRS side airbags
- SRS curtain shield airbags

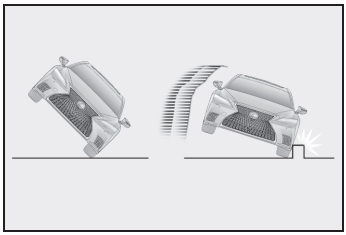
● If the vehicle is involved in a rollover, the following SRS airbags will deploy:
- Both left and right SRS curtain shield airbags

■ **The SRS airbags deploy in an underside impact when**

● The following airbags may deploy if the underside of the vehicle collides with a hard object:
- SRS front airbags
- SRS knee airbags
- SRS seat cushion airbags (if equipped)
- SRS side airbags
- SRS curtain shield airbags

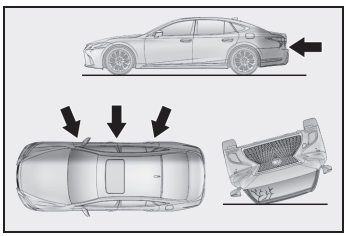


● The following airbags may deploy if the vehicle becomes significantly tilted or is strongly impacted by skidding into a curb, etc.:
- SRS curtain shield airbags

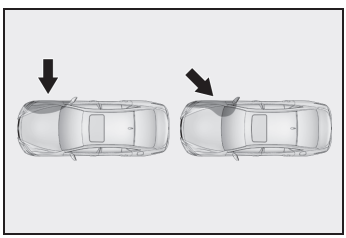


■ **The SRS side airbags will not deploy when**

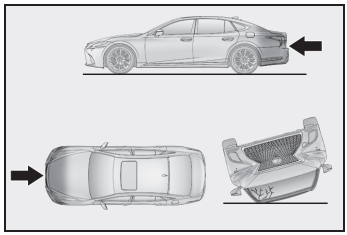
● The following SRS airbags will not normally deploy in side or rear collisions, vehicle rollovers, or low speed frontal collisions. However, if such a collision causes sufficient sudden deceleration, the SRS airbags may deploy.
- SRS front airbags
- SRS knee airbags
- SRS seat cushion airbags (if equipped)



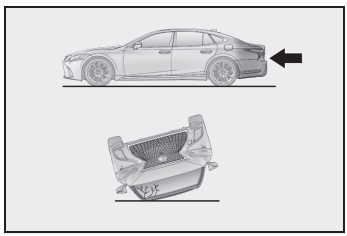
● The following SRS airbags may not deploy if the vehicle is collided with at a certain angle or in a side collision where an area of the vehicle other than the passenger compartment is collided with:
- SRS side airbags
- SRS curtain shield airbags



● The following SRS airbags will not normally deploy in front or rear collisions, vehicle rollovers, or low speed side collisions:
- SRS side airbags



● The following SRS airbags will not normally deploy in rear collisions, vehicle rollovers, or low speed front or side collisions:
- SRS curtain shield airbags

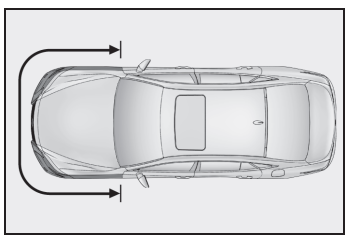


■ **When to contact your Lexus dealer**

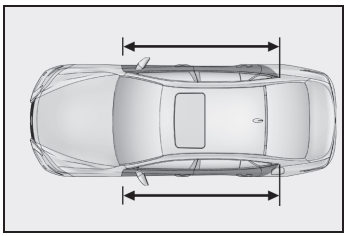
In the following situations, the vehicle will require inspection and/or repair. Contact your Lexus dealer as soon as possible.

● When any of the SRS airbags have been deployed

● When the front of the vehicle is damaged or deformed, or was involved in a collision that was not severe enough to cause any of the following SRS airbags to deploy:
- SRS front airbags
- SRS knee airbags
- SRS seat cushion airbags (if equipped)



● When a door or its surrounding area is damaged, deformed or has had a hole made in it, or was involved in a collision that was not severe enough to cause any of the following SRS airbags to deploy:
- SRS side airbags
- SRS curtain shield airbags



● When the pad section of the steering wheel, the dashboard near the front passenger SRS airbag or the lower side of the instrument panel is scratched, cracked, or otherwise damaged.

● Vehicles with SRS seat cushion airbags: When the seat cushion surface is scratched, cracked, or otherwise damaged.

● When the surface of a seat with an SRS side airbag is scratched, cracked, or otherwise damaged.

● When the part of a front pillar, rear pillar or roof side rail garnish (padding) which covers a SRS curtain shield airbag is scratched, cracked, or otherwise damaged.

WARNING

■ **SRS airbag precautions**

Observe the following precautions. Failure to do so may result in death or serious injury.

● The driver and all passengers must wear their seat belts correctly.
The SRS airbags are supplemental devices to be used with the seat belts.

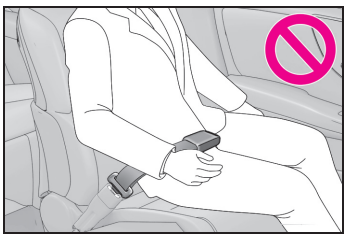
WARNING

- The SRS driver airbag deploys with considerable force, and can cause death or serious injury, especially if the driver is very close to the airbag. The National Highway Traffic Safety Administration (NHTSA) advises:

Since the risk zone for the driver's airbag is the first 2 - 3 in. (50 - 75 mm) of inflation, placing yourself 10 in. (250 mm) from your driver airbag provides you with a clear margin of safety. This distance is measured from the center of the steering wheel to your breastbone. If your current driving position places you less than 10 in. (250 mm) away from the driver airbag, you can change your driving position in several ways:

- Move your seat to the rear as far as possible while still being able to reach the pedals comfortably.
- Slightly recline the seatback. Although vehicle designs vary, many drivers can achieve the 10 in. (251 mm) distance, even with the driver seat all the way forward, simply by reclining the seatback somewhat. If reclining the seatback makes it hard to see the road, raise yourself by using a firm, non-slippery cushion, or raise the seat if your vehicle has that feature.
- If your steering wheel is adjustable, tilt it downward. This points the airbag toward your chest instead of your head and neck. The seat should be adjusted as recommended by the NHTSA, while still being able to control the vehicle with the pedals and steering wheel, and maintaining your view of the instrument panel controls.

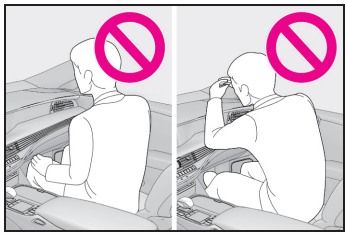
- If a seat belt extender has been connected to a front seat belt buckle but the latch plate of the seat belt has not been fastened to the seat belt extender, the SRS airbag system will judge that the occupant is wearing the seat belt even though the seat belt has not been fastened. In this case, the SRS front airbags may not deploy correctly in a collision, resulting in death or serious injury. Be sure to wear the seat belt correctly when using a seat belt extender.



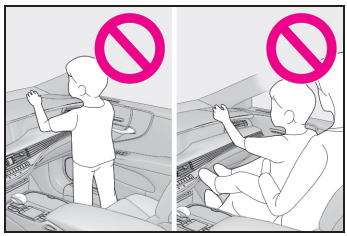
- The SRS front passenger airbag deploys with considerable force, and can cause death or serious injury, especially if the front passenger is very close to the airbag. The front passenger seat should be positioned as far possible from the airbag with the seatback adjusted so that the passenger is sat upright.
- Improperly seated and/or restrained infants and children can be killed or seriously injured by a deploying airbag. An infant or child who is too small to use a seat belt should be properly secured using a child restraint system. Lexus strongly recommends that all infants and children be placed in the rear seats of the vehicle and properly restrained. The rear seats are safer for infants and children than the front passenger seat. (→P.44)

WARNING

- Do not sit on the edge of the seat or lean against the dashboard.



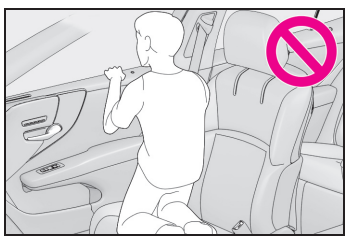
- Do not allow a child to stand in front of the SRS front passenger airbag or sit on the lap of a front passenger.
- Front seat occupants should never hold items on their lap.



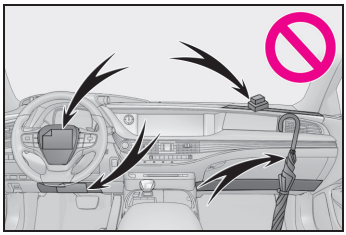
- Do not lean against the door, roof side rail, or front, side, or rear pillar.



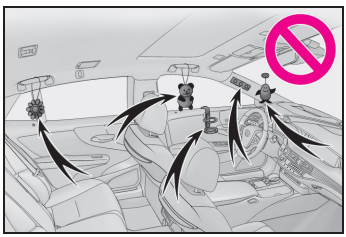
- Do not allow anyone to kneel on a seat toward the door or put their head or hands outside the vehicle.



- Do not attach anything to or lean anything against areas such as the dashboard, steering wheel pad and lower portion of the instrument panel.



- Do not attach anything to areas such as the doors, windshield, side windows, front or rear pillars, roof side rails and assist grips.



- Do not hang coat hangers or other hard objects on the coat hooks. These items could become projectiles if the SRS curtain shield airbags deploy, possibly leading to death or serious injury.
- If a vinyl cover is attached to the area where the SRS knee airbag deploys, be sure to remove it.
- Do not use seat accessories which cover the parts from which the SRS airbags deploy, as they may interfere with inflation of the SRS airbags. Such accessories may prevent the SRS airbags from deploying correctly, may disable the system or cause the SRS airbags to inflate unintentionally, possibly resulting in death or serious injury.
- Do not strike or apply significant force to the SRS airbag system components, front doors or their surrounding area. Doing so may cause the SRS airbags to malfunction.

WARNING

- Do not touch any components of the SRS airbags immediately after the SRS airbags have deployed (inflated) as they may be hot.
- If breathing becomes difficult after the SRS airbags have deployed, open a door or window to allow fresh air in, or leave the vehicle if it is safe to do so. Wash off any residue as soon as possible to prevent skin irritation.
- If a part where an SRS airbag is stored is damaged or cracked, have it replaced by your Lexus dealer.
- Do not place anything, such as a cushion, on the front passenger's seat. Doing so will disperse the passenger's weight, which prevents the sensor from detecting the passenger's weight properly. As a result, the SRS front airbags for the front passenger's seat may not deploy in the event of a collision.

Modification and disposal of SRS airbag system components

Do not dispose of your vehicle or perform any of the following modifications without consulting your Lexus dealer. The SRS airbags may malfunction or deploy unintentionally, possibly leading to death or serious injury.

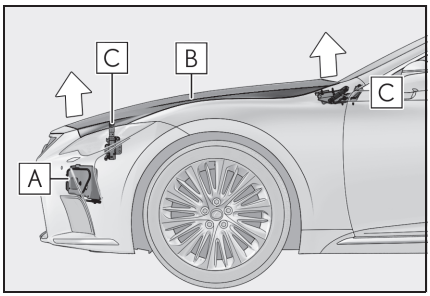
- Removal, installation, disassembly or repair of the SRS airbags
- Repair, removal or modification of the following parts or their surrounding
  - Steering wheel
  - Instrument panel
  - Dashboard
  - Seats
  - Seat upholstery
  - Front pillars
  - Side pillars
  - Rear pillars
  - Roof side rails
  - Front door panels
  - Front door trim
  - Front door speakers
- Modifications to the front door panels (such as making holes in them)
- Repair or modification of the following parts or their surrounding
  - Front fender
  - Front bumper
  - Sides of the vehicle interior
- Installation of the following parts or accessories
  - Bull bars or kangaroo bars
  - Snow plows
  - Winches
  - Roof luggage carriers
- Modifications to the vehicle's suspension
- Installation of electronic devices such as mobile two-way radios and CD players
- Modifications to your vehicle for a persons with a physical disability

Pop Up Hood

In the event of a frontal collision with a body, such as a pedestrian, the Pop Up Hood system raises the hood to reduce the possibility of a serious impact to the pedestrian's head area by adding clearance to the engine compartment.

When the sensors located at the back of the front bumper detect a frontal impact with a body, such as a pedestrian, which meets or exceeds the threshold level while the vehicle is being driven within the operational speed range, the system operates.

System components



A Sensors

B Hood

C Lifters

Pop Up Hood precautions

- Before scrapping your vehicle, make sure to contact your Lexus dealer.
- The Pop Up Hood system cannot be reused once it has operated. Have it replaced by your Lexus dealer.

PCS-linked functions

If the PCS (Pre-Collision System) determines that the possibility of a collision with a pedestrian or bicyclist is high, the Pop Up Hood will be prepared to operate.

Pop Up Hood operational conditions

The Pop Up Hood will operate when the vehicle detects an impact such as the following:

- The front bumper detects a frontal impact equivalent to or greater than that of a pedestrian while the vehicle being driven within the operational speed range of approximately 16 to 34 mph (25 to 55 km/h). (The system is operated by an impact of threshold level or greater, even in the case of a minor collision that may not leave a trace on the front bumper. Also, depending on the impact conditions or vehicle speed, the system may operate by a collision with a light or small object or a small animal.)
- In other situations, such as the following the system may operate when an impact is applied to the lower part of the vehicle or front bumper:
  - Colliding with a curb
  - Falling into a deep hole
  - Landing hard
  - Hitting the slope of a parking lot, an undulating road, a protruding object or falling object

Conditions under which the Pop Up Hood may not operate properly

- If a pedestrian collides with the right or left corner of the front bumper or the side of the vehicle. As such impacts may be difficult to detect, the system may not operate.
- If the vehicle speed is not detected correctly, such as if the vehicle is sliding sideways, the system may not operate properly.

Conditions under which the Pop Up Hood will not operate

The Pop Up Hood will not operate in the following situations:

- Colliding with a lying person
- A frontal impact applied to the front

bumper while driving at speeds outside of the operational speed range

- A side impact or rear impact
- A vehicle rollover (In some accident situations, the Pop Up Hood may operate.)

WARNING

■ When the Pop Up Hood is operated

- Do not pull the hood lock release lever. Doing so after the Pop Up Hood has operated will further raise the hood and may cause an injury. Do not drive with the hood raised, as doing so may block the driver's vision, possibly causing an accident.
- Do not forcibly push down the hood. As the popped up hood cannot be lowered by hand, doing so may deform the hood or cause an injury.
- If the Pop Up Hood has operated, have it replaced by your Lexus dealer. If the Pop Up Hood has operated, stop the vehicle in a safe place and contact your Lexus dealer.
- Do not touch the lifters immediately after the Pop Up Hood has operated, as the lifters may be hot and burn you.

NOTICE

■ Pop Up Hood precautions

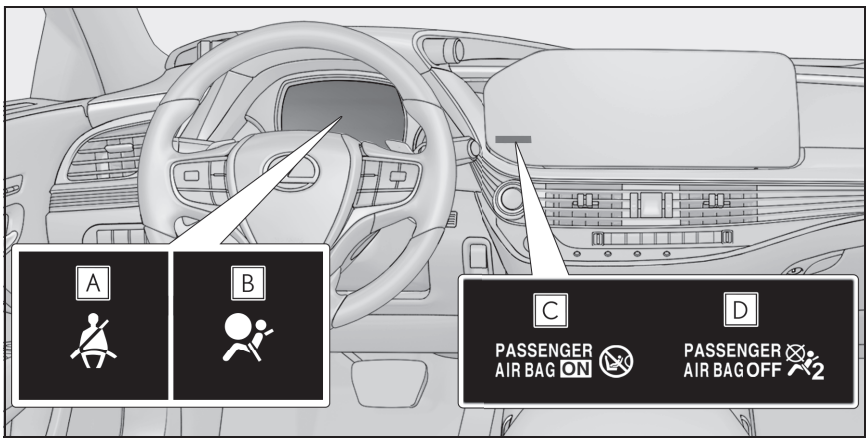
- Make sure to close the hood before driving, as the system may not operate properly if the hood is not fully closed.
- Make sure that all 4 tires are of the specified size and inflated to the specified tire pressure. If tires of a different size are used, the system may not operate properly.
- If something has hit the area around the front bumper, the sensors may be damaged even if the Pop Up Hood has not operated. Have the vehicle inspected by your Lexus dealer.
- Do not remove or repair the parts or wiring of the Pop Up Hood, as doing so may cause accidental operation or prevent the system from operating properly. If repair or replacement is necessary, contact your Lexus dealer.
- Do not remove such components as the front bumper, hood or suspension, or replace them with non-genuine parts, as doing so may prevent the system from operating properly.
- Do not install anything to the front bumper or hood, as doing so may prevent the sensors from detecting an impact correctly and prevent the system from operating properly.
- Do not close the hood with force or apply load to the lifters, as doing so may damage the lifters and prevent the system from operating properly.
- Do not modify the suspension, as changes made to the vehicle height may prevent the system from operating properly.

Front passenger occupant classification system

Your vehicle is equipped with a front passenger occupant classification system.This system detects the conditions of the front passenger seat and activates or deactivates the following SRS airbags.

- SRS front passenger airbag
- SRS front passenger knee airbag

System components



A Front passenger's seat belt reminder light

B SRS warning light

C "AIR BAG ON" indicator light

D "AIR BAG OFF" indicator light

WARNING

■ Front passenger occupant classification system precautions

Observe the following precautions regarding the front passenger occupant classification system.
Failure to do so may cause death or serious injury.

- Wear the seat belt properly.
- Make sure the front passenger's seat belt plate has not been left inserted into the buckle before someone sits in the front passenger seat.

WARNING

- Make sure the "AIR BAG OFF" indicator light is not illuminated when using the seat belt extender for the front passenger seat. If the "AIR BAG OFF" indicator light is illuminated, disconnect the extender tongue from the seat belt buckle, and reconnect the seat belt. Reconnect the seat belt extender after making sure the "AIR BAG ON" indicator light is illuminated. If you use the seat belt extender while the "AIR BAG OFF" indicator light is illuminated, the SRS airbags for the front passenger will not activate, which could cause death or serious injury in the event of a collision.
- Do not apply a heavy load to the front passenger seat or equipment (e.g. seatback pocket).
- Do not put weight on the front passenger seat by putting your hands or feet on the front passenger seat seatback from the rear passenger seat.
- Do not let a rear passenger lift the front passenger seat with their feet or press on the seatback with their legs.
- Do not put objects under the front passenger seat.
- Do not recline the front passenger seatback so far that it touches a rear seat. This may cause the "AIR BAG OFF" indicator light to be illuminated, which indicates that the SRS airbags for the front passenger will not activate in the event of a severe accident. If the seatback touches the rear seat, return the seatback to a position where it does not touch the rear seat. Keep the front passenger seatback as upright as possible when the vehicle is moving. Reclining the seatback excessively may lessen the effectiveness of the seat belt system.
- If an adult sits in the front passenger seat, the "AIR BAG ON" indicator light is illuminated. If the "AIR BAG OFF" indicator is illuminated, ask the passenger to sit up straight, well back in the seat, feet on the floor, and with the seat belt worn correctly. If the "AIR BAG OFF" indicator still remains illuminated, either ask the passenger to move to the rear seat, or if that is not possible, move the front passenger seat fully rearward.
- When it is unavoidable to install a forward-facing child restraint system on the front passenger seat, install the child restraint system on the front passenger seat in the proper order. (→P.45)
- Do not modify or remove the front seats.
- Do not kick the front passenger seat or subject it to severe impact. Otherwise, the SRS warning light may come on to indicate a malfunction of the front passenger occupant classification system. In this case, contact your Lexus dealer immediately.
- Child restraint systems installed on the rear seat should not contact the front seatbacks.
- Do not use a seat accessory, such as a cushion and seat cover, that covers the seat cushion surface.
- Do not modify or replace the upholstery of the front seat.

Front passenger occupant classification system conditions and operation

■ Adult[*1]

Indicators/warning lights	"AIR BAG ON" and "AIR BAG OFF" indicator lights	"AIR BAG ON"
	SRS warning light	Off
	Front passenger's seat belt reminder light	Off[*2] or flashing[*3]
Devices	Front passenger airbag	Activated
	Front passenger knee airbag	

■ Child[*4]

Indicators/warning lights	"AIR BAG ON" and "AIR BAG OFF" indicator lights	"AIR BAG OFF" or "AIR BAG ON"[*4]
	SRS warning light	Off
	Front passenger's seat belt reminder light	Off[*2] or flashing[*3]
Devices	Front passenger airbag	Deactivated or activated[*4]
	Front passenger knee airbag	

■ Child restraint system with infant[*5]

Indicators/warning lights	"AIR BAG ON" and "AIR BAG OFF" indicator lights	"AIR BAG OFF"[*6]
	SRS warning light	Off
	Front passenger's seat belt reminder light	Off[*2] or flashing[*3]
Devices	Front passenger airbag	Deactivated
	Front passenger knee airbag	

■ Unoccupied

Indicators/warning lights	"AIR BAG ON" and "AIR BAG OFF" indicator lights	"AIR BAG OFF"
	SRS warning light	Off
	Front passenger's seat belt reminder light	

Devices	Front passenger airbag	Deactivated
	Front passenger knee airbag	

■ System malfunction

Indicators/warning lights	"AIR BAG ON" and "AIR BAG OFF" indicator lights	"AIR BAG OFF"
	SRS warning light	On
	Front passenger's seat belt reminder light	Off
Devices	Front passenger airbag	Deactivated
	Front passenger knee airbag	

*1: The system judges a person of adult size as an adult. When a smaller adult sits in the front passenger seat, the system may not recognize them as an adult depending on their physique and posture.

*2: In the event the front passenger is wearing a seat belt

*3: In the event the front passenger does not wear a seat belt

*4: For some children, child in seat, child in booster seat or child in convertible seat, the system may not recognize them as a child. Factors which may affect this can be the physique or posture.

*5: Never install a rear-facing child restraint system on the front passenger seat. A forward-facing child restraint system should only be installed on the front passenger seat when it is unavoidable. (→P.44)

*6: In case the indicator light is not illuminated, consult this manual on how to install the child restraint system properly. (→P.45)

Exhaust gas precautions

Harmful substance to the human body is included in exhaust gases if inhaled.

⚠ WARNING

Exhaust gases include harmful carbon monoxide (CO), which is colorless and odorless. Observe the following precautions.
Failure to do so may cause exhaust gases enter the vehicle and may lead to an accident caused by light-headedness, or may lead to death or a serious health hazard.

■ Important points while driving

- Keep the trunk lid closed.
- If you smell exhaust gases in the vehicle even when the trunk lid is closed, open the windows and have the vehicle inspected at your Lexus dealer as soon as possible.

■ When parking

- If the vehicle is in a poorly ventilated area or a closed area, such as a garage, stop the engine.
- Do not leave the vehicle with the engine on for a long time.
  If such a situation cannot be avoided, park the vehicle in an open space and ensure that exhaust fumes do not enter the vehicle interior.
- Do not leave the engine running in an area with snow build-up, or where it is snowing. If snowbanks build up around the vehicle while the engine is running, exhaust gases may collect and enter the vehicle.

■ Exhaust pipe

The exhaust system needs to be checked periodically. If there is a hole or crack caused by corrosion, damage to a joint or abnormal exhaust noise, be sure to have the vehicle inspected and repaired by your Lexus dealer.

Riding with children

Observe the following precautions when children are in the vehicle. Use a child restraint system appropriate for the child, until the child becomes large enough to properly wear the vehicle's seat belt.

- It is recommended that children sit in the rear seats to avoid accidental contact with the shift lever, wiper switch etc.
- Use the rear door child-protector lock or the window lock switch to avoid children opening the door while driving or operating the power window accidentally. (→P.100, 148)
- Do not let small children operate equipment which may catch or pinch body parts, such as the power window, hood, trunk, seats etc.

WARNING

■ When children are in the vehicle

Never leave children unattended in the vehicle, and never allow children to have or use the key.

Children may be able to start the vehicle or shift the vehicle into neutral. There is also a danger that children may injure themselves by playing with the windows, the moon roof or panoramic moon roof, or other features of the vehicle. In addition, heat build-up or extremely cold temperatures inside the vehicle can be fatal to children.

Child restraint systems

Before installing a child restraint system in the vehicle, there are precautions that need to be observed, different types of child restraint systems, as well as installation methods, etc., written in this manual.

Use a child restraint system when riding with a small child that cannot properly use a seat belt. For the child's safety, install the child restraint system to a rear seat. Be sure to follow the installation method that is in the operation manual enclosed with the restraint system.

Table of contents

Points to remember: P.44

Child restraint system: P.45

When using a child restraint system: P.46

Child restraint system installation method
- Fixed with a seat belt: P.49
- Fixed with a child restraint LATCH anchor: P.52
- Using an anchor bracket (for top tether strap): P.54

Points to remember

The laws of all 50 states of the U.S.A. as well as Canada now require the use of child restraint systems.

- Prioritize and observe the warnings, as well as the laws and regula-

tions for child restraint systems.

- Use a child restraint system until the child becomes large enough to properly wear the vehicle's seat belt.
- Choose a child restraint system that suits your vehicle and is appropriate to the age and size of the child.

WARNING

■ When a child is riding

Observe the following precautions. Failure to do so may result in death or serious injury.

- For effective protection in automobile accidents and sudden stops, a child must be properly restrained, using a seat belt or child restraint system which is correctly installed. For installation details, refer to the operation manual enclosed with the child restraint system. General installation instruction is provided in this manual.
- Lexus strongly urges the use of a proper child restraint system that conforms to the weight and size of the child, installed on the rear seat. According to accident statistics, the child is safer when properly restrained in the rear seat than in the front seat.
- Holding a child in your or someone else's arms is not a substitute for a child restraint system. In an accident, the child can be crushed against the windshield or between the holder and the interior of the vehicle.

■ Handling the child restraint system

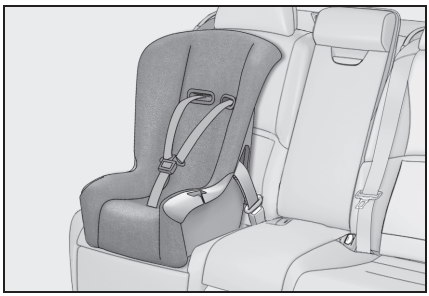
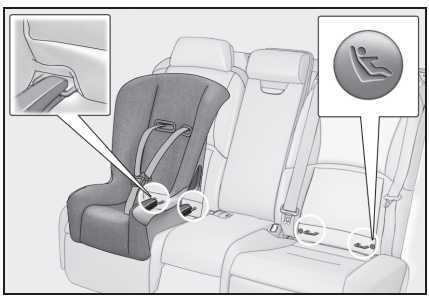
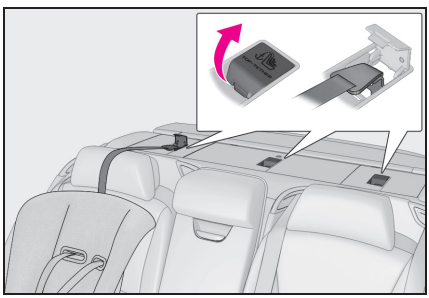
If the child restraint system is not properly fixed in place, the child or other passengers may be seriously injured or even killed in the event of sudden braking, sudden swerving, or an accident.

- If the vehicle were to receive a strong impact from an accident, etc., it is possible that the child restraint system has damage that is not readily visible. In such cases, do not reuse the restraint system.
- Make sure you have complied with all installation instructions provided with the child restraint system manufacturer and that the system is properly secured.
- Keep the child restraint system properly secured on the seat even if it is not in use. Do not store the child restraint system unsecured in the passenger compartment.
- If it is necessary to detach the child restraint system, remove it from the vehicle or store it securely in the trunk.

Child restraint system

■ Types of child restraint system installation methods

Confirm with the operation manual enclosed with the child restraint system about the installation of the child restraint system.

Installation method		Page
Seat belt attachment		P.49
Child restraint LATCH anchors attachment		P.52
Anchor brackets (for top tether strap) attachment		P.54

When using a child restraint system

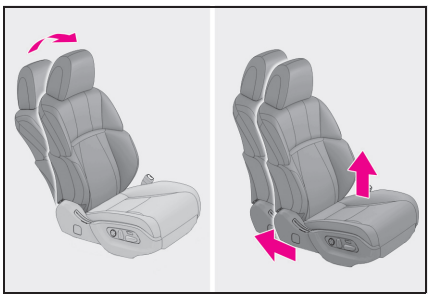
■ When installing a child restraint system to a front passenger seat

For the safety of a child, install child restraint systems to a rear seats. When installing child restraint system to a front passenger seat is unavoidable, adjust the seat as follows and install the child restraint system.

- Move the front seat fully rearward.
- Adjust the seatback angle to the most upright position.
- Adjust the front of the seat cushion to the lowest position.
- Adjust the seat height to the uppermost position.
- Adjust the lumbar support to the lowest position.
- Adjust the shoulder bolster to the

lowest position (if equipped).

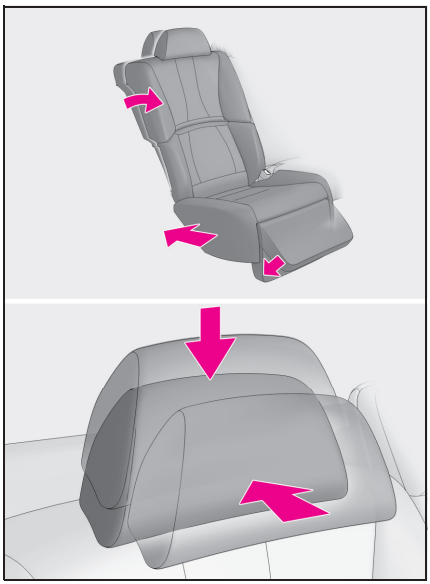
- Adjust the pelvic support to the lowest position.
- Adjust the seatback side bolster to the widest position (if equipped).
- Adjust the seat cushion side bolster to the lowest position (if equipped).
- Adjust the hip support to the lowest position (if equipped).
- If the head restraint interferes with the child restraint system installation and the head restraint can be removed, remove the head restraint. Otherwise, put the head restraint in the upper most position.



When installing a child restraint system to a power rear seat (if equipped)

When using a child restraint system in an outer rear seat, adjust the seat as follows and install the child restraint system.

- Adjust the seat cushion to the fully rearward position.
- Adjust the upper seatback to the rearmost position.
- Adjust the front of the seat cushion to the lowest position.
- Adjust the head restraint to the lowest and rearmost position.
- Adjust the shoulder bolster to the lowest position.
- Adjust the lumbar support to the lowest position.
- Adjust the pelvic support to the lowest position.
- Disable the automatic rear seat operation. (→P.123)
- For the rear seat with an ottoman (if equipped): Adjust the seatback to the most upright position and ottoman (footrest) to the stowed position.



WARNING

When using a child restraint system

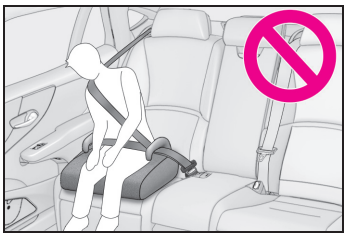
Observe the following precautions. Failure to do so may result in death or serious injury.

WARNING

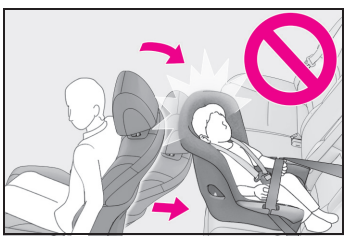
- Never install a rear-facing child restraint system on the front passenger seat even if the "AIR BAG OFF" indicator light is illuminated. In the event of an accident, the force of the rapid inflation of the front passenger airbag can cause death or serious injury to the child if the rear-facing child restraint system is installed on the front passenger seat.
- A forward-facing child restraint system may be installed on the front passenger seat only when it is unavoidable. A child restraint system that requires a top tether strap should not be used in the front passenger seat since there is no top tether strap anchor for the front passenger seat.
- A forward-facing child restraint system may be installed on the front passenger seat only when it is unavoidable. When installing a forward-facing child restraint system on the front passenger seat, adjust the seatback angle to the most upright position, move the seat to the rearmost position, and raise the seat to the upper most position, even if the "AIR BAG OFF" indicator light is illuminated.



- Do not allow the child to lean his/her head or any part of his/her body against the door or the area of the seat, front or rear pillars, or roof side rails from which the SRS side airbags or SRS curtain shield airbags deploy even if the child is seated in the child restraint system. It is dangerous if the SRS side and curtain shield airbags inflate, and the impact could cause death or serious injury to the child.



- When a booster seat is installed, always ensure that the shoulder belt is positioned across the center of the child's shoulder. The belt should be kept away from the child's neck, but not so that it could fall off the child's shoulder.
- Use child restraint system suitable to the age and size of the child and install it to the rear seat.
- If the driver's seat interferes with the child restraint system and prevents it from being attached correctly, attach the child restraint system to the right-hand rear seat.



- Adjust the front passenger seat so that it does not interfere with the child restraint system.

Child restraint system fixed with a seat belt

A child restraint system for a small child or baby must itself be properly restrained on the seat with the lap portion of the lap/shoulder belt.

■ Installing child restraint system using a seat belt (child restraint lock function belt)

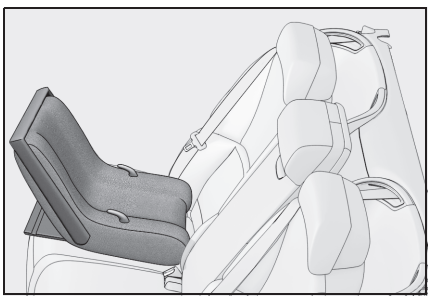
Install the child restraint system in accordance to the operation manual enclosed with the child restraint system.

■ Rear-facing—Infant seat/convertible seat

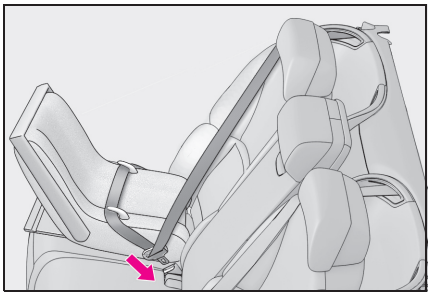
1 Adjust the rear seat

Vehicles with power rear seat: If there is a gap between the child seat and the seatback, adjust the seatback angle until good contact is achieved.

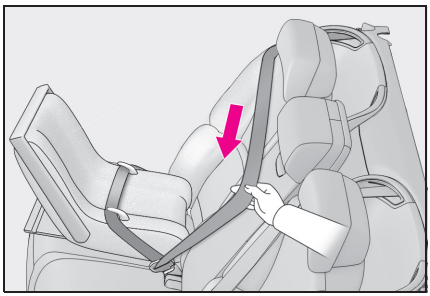
2 Place the child restraint system on the rear seat facing the rear of the vehicle.



3 Run the seat belt through the child restraint system and insert the plate into the buckle. Make sure that the belt is not twisted.

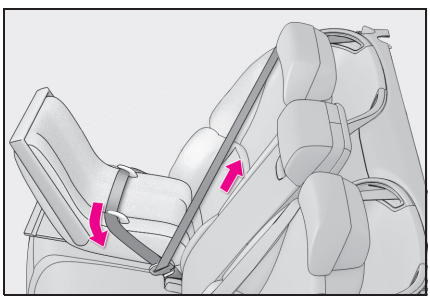


4 Fully extend the shoulder belt and allow it to retract to put it in lock mode. In lock mode, the belt cannot be extended.



5 While pushing the child restraint system down into the rear seat, allow the shoulder belt to retract until the child restraint system is securely in place.

After the shoulder belt has retracted to a point where there is no slack in the belt, pull the belt to check that it cannot be extended.



6 After installing the child restraint system, rock it back and forth to ensure that it is installed securely. (→P.52)

■ **Forward-facing—Convertible seat**

1 Adjust the seat

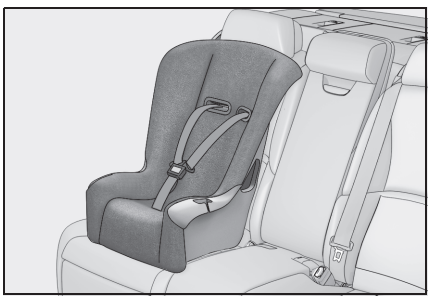
▶ When using the front passenger seat

If installing the child restraint system to the front passenger seat is unavoidable, refer to P.46for front passenger seat adjustment.

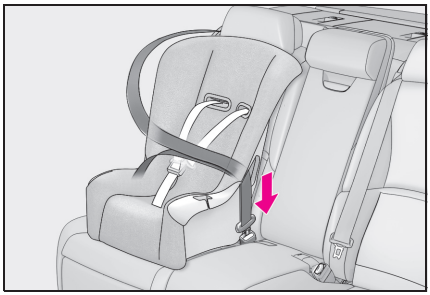
▶ When using the rear seat

If there is a gap between the child seat and the seatback, adjust the seatback angle until good contact is achieved.

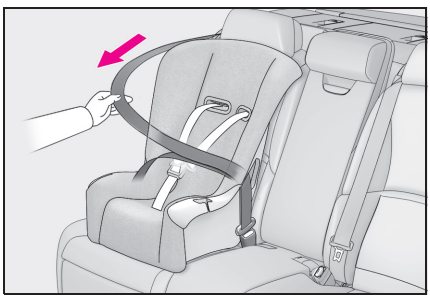
2 Place the child restraint system on the seat facing the front of the vehicle.



3 Run the seat belt through the child restraint system and insert the plate into the buckle. Make sure that the belt is not twisted.

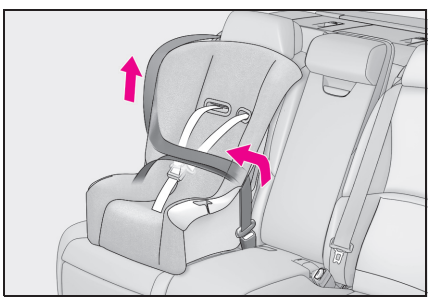


4 Fully extend the shoulder belt and allow it to retract to put it in lock mode. In lock mode, the belt cannot be extended.



5 While pushing the child restraint system into the rear seat, allow the shoulder belt to retract until the child restraint system is securely in place.

After the shoulder belt has retracted to a point where there is no slack in the belt, pull the belt to check that it cannot be extended.



6 If the child restraint has a top tether strap, follow the child restraint manufacturer's operation manual regarding the installation, using the top tether strap to latch onto the top tether strap anchor. (→P.54)

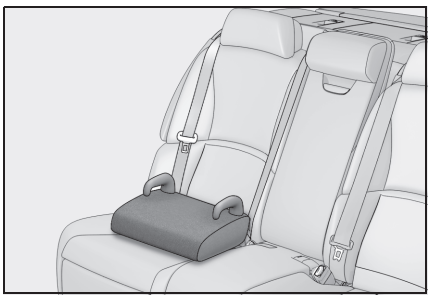
7 After installing the child restraint system, rock it back and forth to ensure that it is installed securely. (→P.52)

■ **Booster seat**

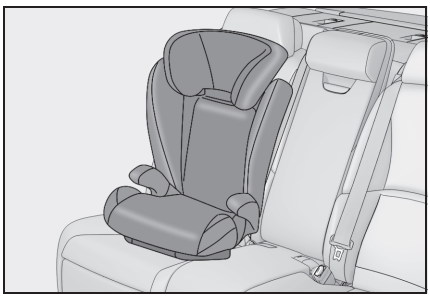
1 If installing the child restraint system to the front passenger seat is unavoidable, refer to P.46for front passenger seat adjustment.

2 Place the child restraint system on the seat facing the front of the vehicle.

▶ Booster type



▶ High back type



4 Sit the child in the child restraint system. Fit the seat belt to the child restraint system according to the manufacturer's instructions and insert the plate into the buckle. Make sure that the belt is not twisted.

Check that the shoulder belt is correctly positioned over the child's shoulder and that the lap belt is as low as possible. (→P.26)

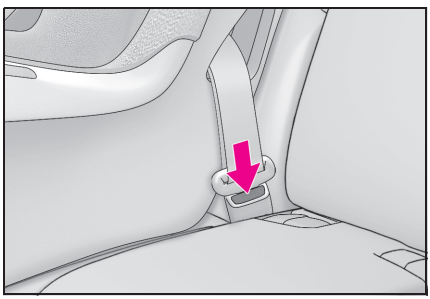


■ **Removing a child restraint system installed with a seat belt**

Press the buckle release button and fully retract the seat belt.

When releasing the buckle, the child restraint system may spring up due to the rebound of the seat cushion. Release the buckle while holding down the child restraint system.

Since the seat belt automatically reels itself, slowly return it to the stowing position.



WARNING

■ When installing a child restraint system

Observe the following precautions. Failure to do so may result in death or serious injury.

- Do not allow children to play with the seat belt. If the seat belt becomes twisted around a child's neck, it may lead to choking or other serious injuries that could result in death.
  If this occurs and the buckle cannot be unfastened, scissors should be used to cut the belt.
- Ensure that the belt and plate are securely locked and the seat belt is not twisted.
- Shake the child restraint system left and right, and forward and backward to ensure that it has been securely installed.
- When a booster seat is installed, always ensure that the shoulder belt is positioned across the center of the child's shoulder. The belt should be kept away from the child's neck, but not so that it could fall off the child's shoulder.
- Follow all installation instructions provided by the child restraint system manufacturer.
- When securing some types of child restraint systems in rear seats, it may not be possible to properly use the seat belts in positions next to the child restraint without interfering with it or affecting seat belt effectiveness. Be sure your seat belt fits snugly across your shoulder and low on your hips. If it does not, or if it interferes with the child restraint, move to a different position. Failure to do so may result in death or serious injury.
- When installing a child restraint system in the rear center seat, adjust both seat cushions to the same position and align both seatbacks at the same angle. Otherwise, the child restraint system cannot be securely restrained and this may cause death or serious injuries in the event of sudden braking, sudden swerving or an accident.
- If the seat is adjusted, reconfirm the security of the child restraint system.

■ When installing a booster seat

To prevent the belt from going into ALR lock mode, do not fully extend the shoulder belt. ALR mode causes the belt to tighten only. This could cause injury or discomfort to the child. (→P.28)

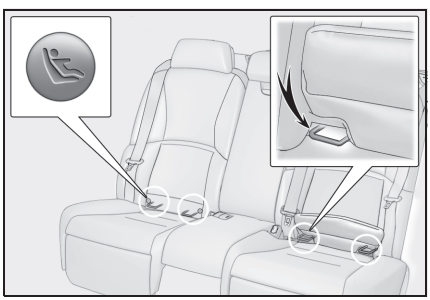
■ Do not use a seat belt extender

If a seat belt extender is used when installing a child restraint system, the seat belt will not securely hold the child restraint system, which could cause death or serious injury to the child or other passengers in the event of sudden braking, sudden swerving or an accident.

Child restraint system fixed with a child restraint LATCH anchor

■ Child restraint LATCH anchors

LATCH anchors are provided for the outboard rear seat. (Buttons displaying the location of the anchors are attached to the seats.)



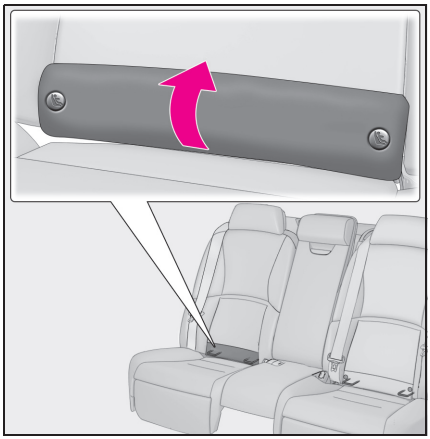
When installing in the rear outboard seats

Install the child restraint system in accordance to the operation manual enclosed with the child restraint system.

1 Vehicles with power rear seat: Adjust the seat

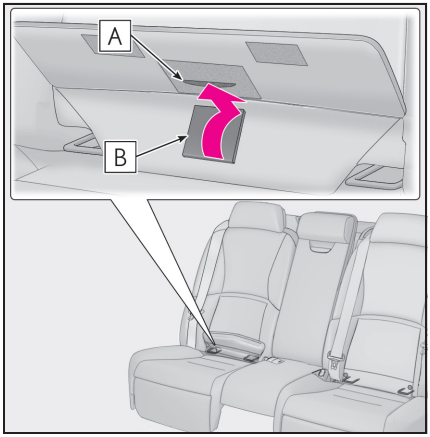
If there is a gap between the child seat and the seatback, adjust the seatback angle until good contact is achieved. (→P.47)

2 Open the cover.



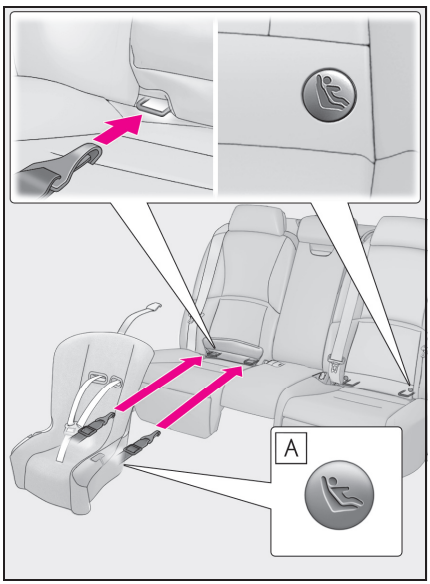
3 Insert the tab [B] into the slit [A] of the cover.

The cover will be held open.



▶ With flexible lower attachments

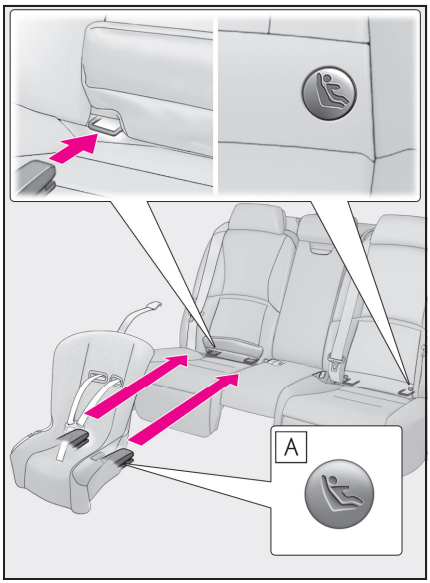
4 Latch the hooks of the lower attachments onto the LATCH anchors.
For owners in Canada:
The symbol on a child restraint system indicates [A] the presence of a lower connector system.



[A] Canada only

▶ With rigid lower attachments

4 Latch the buckles onto the LATCH anchors.
For owners in Canada:
The symbol on a child restraint system indicates A the presence of a lower connector system.



A Canada only

5 If the child restraint has a top tether strap, follow the child restraint manufacturer's operation manual regarding the installation, using the top tether strap to latch onto the top tether strap anchor. (→P.54)

6 After installing the child restraint system, rock it back and forth to ensure that it is installed securely. (→P.52)

■ Laws and regulations pertaining to anchors

The LATCH system conforms to FMVSS225 or CMVSS210.2.

Child restraint systems conforming to FMVSS213 or CMVSS213 specifications can be used.
This vehicle is designed to conform to SAE J1819.

⚠ WARNING

■ When installing a child restraint system

Observe the following precautions. Failure to do so may result in death or serious injury.

- When using the LATCH anchors, be sure that there are no foreign objects around the anchors and that the seat belt is not caught behind the child restraint system.
- Follow all installation instructions provided by the child restraint system manufacturer.
- When securing some types of child restraint systems in rear seats, it may not be possible to properly use the seat belts in positions next to the child restraint without interfering with it or affecting seat belt effectiveness. Be sure your seat belt fits snugly across your shoulder and low on your hips. If it does not, or if it interferes with the child restraint, move to a different position. Failure to do so may result in death or serious injury.
- If the seat is adjusted, reconfirm the security of the child restraint system.

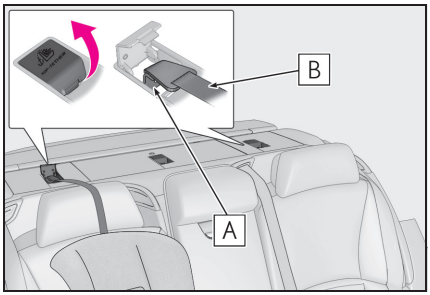
Using an anchor bracket (for top tether strap)

■ Anchor brackets (for top tether strap)

Anchor brackets are provided for each rear seat.

Use anchor brackets when fixing the top tether strap.

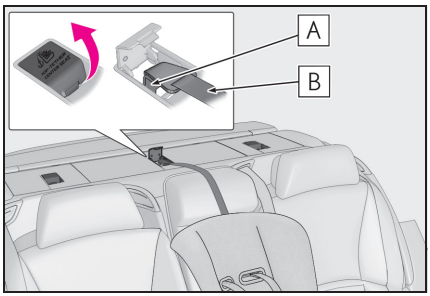
▶ Outboard rear seats



A Anchor brackets

B Top tether strap

▶ Rear center seat



A Anchor bracket

B Top tether strap

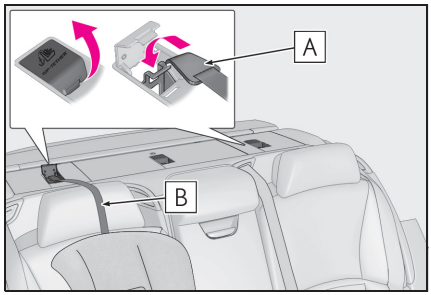
■ Fixing the top tether strap to the anchor bracket

Install the child restraint system in accordance to the operation manual enclosed with the child restraint system.

Open the anchor bracket cover, latch the hook onto the anchor bracket and tighten the top tether strap.

Make sure the top tether strap is securely latched. (→P.52)

▶ Outboard rear seats

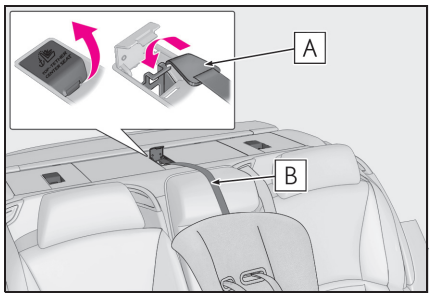


A Hook

B Top tether strap

Adjust the head restraint to the lowest position.

▶ Rear center seat



A Hook

B Top tether strap

■ Laws and regulations pertaining to anchors

The LATCH system conforms to FMVSS225 or CMVSS210.2.
Child restraint systems conforming to FMVSS213 or CMVSS213 specifications can be used.
This vehicle is designed to conform to SAE J1819.

WARNING

■ When installing a child restraint system

Observe the following precautions. Failure to do so may result in death or serious injury.

- Firmly attach the top tether strap and make sure that the belt is not twisted.
- Do not attach the top tether strap to anything other than the anchor bracket.
- Follow all installation instructions provided by the child restraint system manufacturer.
- Be sure to have the top tether strap pass over the top of the head restraint. If the belt passes below the head restraint, it is possible that the child restraint system may not be securely fixed.
- If the seat is adjusted, reconfirm the security of the child restraint system.

NOTICE

■ Anchor brackets (for top tether strap)

When not in use, make certain to close the lid. If it remains open, the lid may be damaged.

Safety Connect*

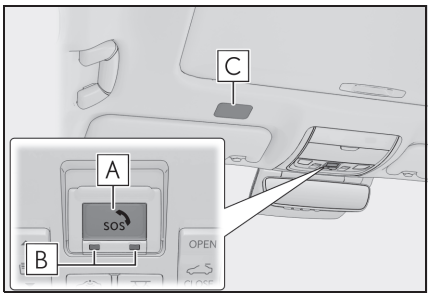
*: If equipped

Safety Connect is a subscription-based telematics service that uses Global Positioning System (GPS) data and embedded cellular technology to provide safety and security features to subscribers. Safety Connect is supported by Lexus' designated response center, which operates 24 hours per day, 7 days per week.

Safety Connect service is available by subscription on select, telematics hardware-equipped vehicles.

By using the Safety Connect service, you are agreeing to be bound by the Telematics Subscription Service Agreement and its Terms and Conditions, as in effect and amended from time to time, a current copy of which is available at Lexus.com. All use of the Safety Connect service is subject to such then-applicable Terms and Conditions.

System components



A "SOS" button

B LED light indicators

C Microphone

Services

Subscribers have the following Safety Connect services available:

- Automatic Collision Notification*

Helps drivers receive necessary response from emergency service providers. (→P.59)

*: U.S. Patent No. 7,508,298 B2

- Stolen Vehicle Location

Helps drivers in the event of vehicle theft. (→P.59)

- Emergency Assistance Button ("SOS")

Connects drivers to response-center support. (→P.59)

- Enhanced Roadside Assistance

Provides drivers various on-road assistance. (→P.59)

Subscription

After you have signed the Telematics

Subscription Service Agreement and are enrolled, you can begin receiving services.

A variety of subscription terms is available for purchase. Contact your Lexus dealer, call the following or push the "SOS" button in your vehicle for further subscription details.

- The United States

1-800-25-LEXUS (1-800-255-3987)

- Canada

1-800-26-LEXUS (1-800-265-3987)

- Puerto Rico

1-877-539-8777

■ **Safety Connect Services Information**

- Phone calls using the vehicles Bluetooth® technology will not be possible during Safety Connect.
- Safety Connect is available beginning Fall 2009 on select Lexus models (in the contiguous United States only). Contact with the Safety Connect response center is dependent upon the telematics device being in operative condition, cellular connection availability, and GPS satellite signal reception, which can limit the ability to reach the response center or receive emergency service support. Enrollment and Telematics Subscription Service Agreement required. A variety of subscription terms is available; charges vary by subscription term selected and location.
- Automatic Collision Notification, Emergency Assistance and Stolen Vehicle Location will function in the United States, including Hawaii and Alaska, Puerto Rico and in Canada, and Enhanced Roadside Assistance will function in the United States, Puerto Rico and in Canada.
- Automatic Collision Notification, Emergency Assistance, Stolen Vehicle and Enhanced Road Assistance will not function in the United States Virgin Islands. For vehicles first sold in the USVI, no Safety Connect services will function in and outside the United States Virgin Islands.
- Safety Connect services are not subject to section 255 of the Telecommunications Act and the device is not TTY compatible.

■ **Languages**

The Safety Connect response center will offer support in multiple languages. The Safety Connect system will offer voice prompts in English, Spanish, and French. Please indicate your language of choice when enrolling.

■ **When contacting the response center**

You may be unable to contact the response center if the network is busy.

Safety Connect LED light Indicators

When the engine switch is turned to IGNITION ON mode, the red indicator light comes on for 2 seconds then turns off. Afterward, the green indicator light comes on, indicating that the service is active.

The following indicator light patterns indicate specific system usage conditions:

- Green indicator light on = Active service
- Green indicator light flashing = Safety Connect call in process
- Red indicator light (except at vehicle start-up) = System malfunction (contact your Lexus dealer)
- No indicator light (off) = Safety Connect service not active

Safety Connect services

Automatic Collision Notification

In case of either airbag deployment or severe rear-end collision, the system is designed to automatically call the response center. The responding agent receives the vehicle's location and attempts to speak with the vehicle occupants to assess the level of emergency. If the occupants are unable to communicate, the agent automatically treats the call as an emergency, contacts the nearest emergency services provider to describe the situation, and requests that assistance be sent to the location.

Stolen Vehicle Location

If your vehicle is stolen, Safety Connect can work with local authorities to assist them in locating and recovering the vehicle. After filing a police report, call the Safety Connect response center at 1-800-25-LEXUS (1-800-255-3987) in the United States, 1-877-539-8777 in Puerto Rico or 1-800-265-3987 in Canada, and follow the prompts for Safety Connect to initiate this service.

In addition to assisting law enforcement with recovery of a stolen vehicle, Safety-Connect-equipped vehicle location data may, under certain circumstances, be shared with third parties to locate your vehicle. Further information is available at Lexus.com.

Emergency Assistance Button ("SOS")

In the event of an emergency on the road, push the "SOS" button to reach the Safety Connect response center. The answering agent will determine your vehicle's location, assess the emergency, and dispatch the necessary assistance required.

If you accidentally press the "SOS" button, tell the response-center agent that you are not experiencing an emergency.

Enhanced Roadside Assistance

Enhanced Roadside Assistance adds GPS data to the already included warranty-based Lexus roadside service.

Subscribers can press the "SOS" button to reach a Safety Connect response-center agent, who can help with a wide range of needs, such as: towing, flat tire, fuel delivery, etc. For a description of the Roadside Assistance services and their limitations, please see the Safety Connect Terms and Conditions, which are available at Lexus.com.

Safety information for Safety Connect

Important! Read this information about exposure to radio frequency signals before using Safety Connect;

The Safety Connect system installed in your vehicle is a low-power radio transmitter and receiver. It receives and also sends out radio frequency (RF) signals.

In August 1996, the Federal Commu-

nications Commission (FCC) adopted RF exposure guidelines with safety levels for mobile wireless phones. Those guidelines are consistent with the safety standards previously set by the following U.S. and international standards bodies.

- ANSI (American National Standards Institute) C95.1 [1992]
- NCRP (National Council on Radiation Protection and Measurement) Report 86 [1986]
- ICNIRP (International Commission on Non-Ionizing Radiation Protection) [1996]

Those standards were based on comprehensive and periodic evaluations of the relevant scientific literature. Over 120 scientists, engineers, and physicians from universities, and government health agencies and industries reviewed the available body of research to develop the ANSI Standard (C95.1).

The design of Safety Connect complies with the FCC guidelines in addition to those standards.

Engine immobilizer system

The vehicle's keys have built-in transponder chips that prevent the engine from starting if a key has not been previously registered in the vehicle's on-board computer.

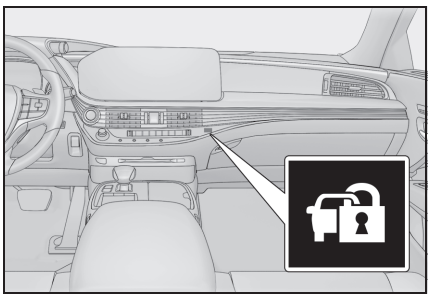
Never leave the keys inside the vehicle when you leave the vehicle.

This system is designed to help prevent vehicle theft but does not guarantee absolute security against all vehicle thefts.

Operating the system

The indicator light flashes after the engine switch has been turned off to indicate that the system is operating.

The indicator light stops flashing after the engine switch has been turned to ACCESSORY or IGNITION ON mode to indicate that the system has been canceled.



■ **System maintenance**

The vehicle has a maintenance-free type engine immobilizer system.

■ **Conditions that may cause the system to malfunction**

- If the grip portion of the key is in contact with a metallic object
- If the key is in close proximity to or touching a key to the security system (key with a built-in transponder chip) of another vehicle

NOTICE

■ **To ensure the system operates correctly**

Do not modify or remove the system. If modified or removed, the proper operation of the system cannot be guaranteed.

Alarm

The alarm uses light and sound to give an alert when an intrusion is detected.
The alarm is triggered in the following situations when the alarm is set:

- A locked door or trunk is unlocked or opened in any way other than using the entry function or wireless remote control. (The doors will lock again automatically.)
- The hood is opened.

Setting/deactivating/stopping the alarm system

Items to check before locking the vehicle

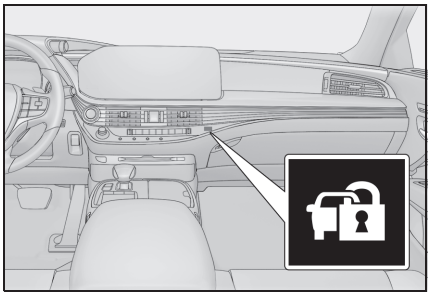
To prevent unexpected triggering of the alarm and vehicle theft, make sure of the following:

- Nobody is in the vehicle.
- The windows, moon roof (if equipped) and panoramic moon roof (if equipped) are closed before the alarm is set.
- No valuables or other personal items are left in the vehicle.

Setting

Close the doors, trunk and hood, and lock all the doors. The system will be set automatically after 30 seconds.

The indicator light changes from being on to flashing when the system is set.



Deactivating or stopping

Do one of the following to deactivate or stop the alarms:

- Unlock the doors or open the trunk using the entry function or wireless remote control.
- Turn the engine switch to ACCESSORY or IGNITION ON mode, or start the engine. (The alarm will be deactivated or stopped after a few seconds.)

Setting the alarm

The alarm can be set if all the doors are closed even with the trunk or hood open.

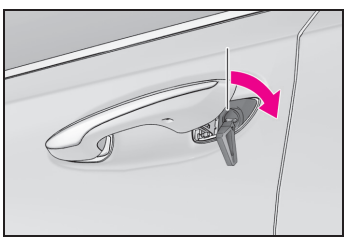
System maintenance

The vehicle has a maintenance-free type alarm system.

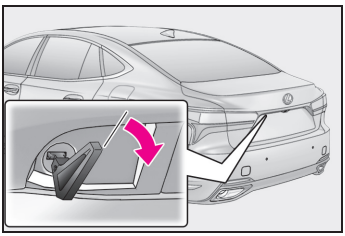
Triggering of the alarm

The alarm may be triggered in the following situations:
(Stopping the alarm deactivates the alarm system.)

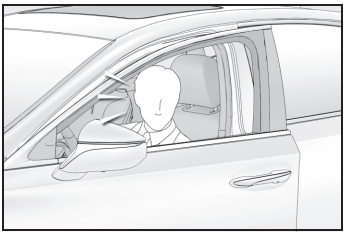
- The doors are unlocked using the mechanical key.



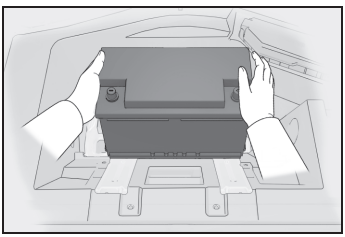
- The trunk is opened using the mechanical key.



- A person inside the vehicle opens a door, the trunk or hood, or unlocks the vehicle.



- The battery is recharged or replaced when the vehicle is locked. (→P.481)



■ Alarm-operated door lock

In the following cases, depending on the situation, the door may automatically lock to prevent improper entry into the vehicle:

- When a person remaining in the vehicle unlocks the door and the alarm is activated.
- While the alarm is activated, a person remaining in the vehicle unlocks the door.
- When recharging or replacing the battery.

NOTICE

■ To ensure the system operates correctly

Do not modify or remove the system. If modified or removed, the proper operation of the system cannot be guaranteed.

Pre-alarm

If a door is unlocked with the mechanical key while the alarm is being set, the pre-alarm will sound for 10 seconds.

If either the door is locked again or the pre-alarm is stopped within those 10 seconds, an alarm will sound.

Do any of the following in order to deactivate or stop the pre-alarm:

- Close the doors, and lock all doors by entry function or wireless remote control.
- Turn the engine switch to ACCESSORY or IGNITION ON mode, or start the engine. (The alarm will be deactivated and stop after a few seconds.)

2-1. Instrument cluster

Warning lights and indicators 66

Gauges and meters 70

Multi-information display..... 77

Head-up display 79

Displayed content..... 82

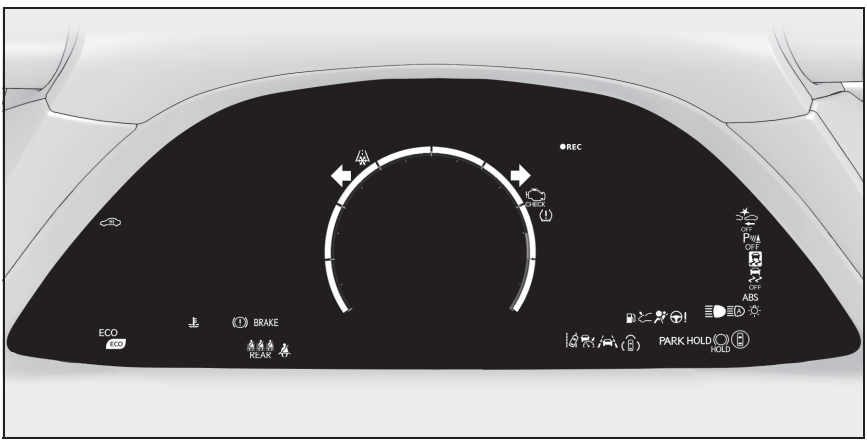
Warning lights and indicators

The warning lights and indicators on the instrument cluster, center panel and outside rear view mirrors inform the driver of the status of the vehicle's various systems.

Warning lights and indicators displayed on the instrument cluster

For the purpose of explanation, the following illustration displays all warning lights and indicators illuminated.

The location of warning lights and indicators may differ depending on the setting.



Warning lights

Warning lights inform the driver of malfunctions in the indicated vehicle's systems.

BRAKE (U.S.A.) Brake system warning light *1 (→P.457)

(red) (Canada) Brake system warning light *1 (→P.457)

(yellow) Brake system warning light *1 (→P.457)

High coolant temperature warning light *2 (→P.457)

Charging system warning light *2 (→P.458)

Low engine oil pressure warning light *2 (→P.458)

CHECK (U.S.A.) Malfunction indicator lamp *1 (→P.458)

(Canada) Malfunction indicator lamp *1 (→P.458)

SRS warning light *1 (→P.458)


Pop Up Hood warning light*1 (→P.459)



(U.S.A.)
ABS warning light*1 (→P.459)


(Canada)
ABS warning light*1 (→P.459)


Inappropriate pedal operation warning light*2 (→P.459)


(red)
Electric power steering system warning light*1 (→P.460)


(yellow)
Electric power steering system warning light*1 (→P.460)


Low fuel level warning light (→P.460)


Driver's and front passenger's seat belt reminder light (→P.460)



Rear passengers' seat belt reminder lights (→P.460)


Tire pressure warning light*1 (→P.461)


Slip indicator*1 (→P.461)



(flashes)
(U.S.A.)
Parking brake indicator (→P.462)


(flashes)
(Canada)
Parking brake indicator (→P.462)



(flashes)
Brake hold operated indicator*1 (→P.462)



Intuitive parking assist OFF indicator*1 (if equipped) (→P.462)



PCS warning light*1 (→P.462)


(yellow)
LTA indicator (→P.463)


(yellow)
LDA indicator (→P.463)


(yellow)
PDA indicator (→P.463)


(yellow)
Dynamic radar cruise control indicator (→P.463)


(yellow)
Cruise control indicator (→P.463)


Driving assist information indicator*1 (→P.464)

*1: These lights come on when the engine switch is turned to IGNITION ON mode to indicate that a system check is being performed. They will turn off after the engine is started, or after a few seconds. There may be a malfunction in a system if the lights do not come on, or turn off. Have the vehicle inspected by your Lexus dealer.

*2: This light illuminates on the multi-information display.

WARNING

■ If a safety system warning light does not come on

Should a safety system light such as the ABS and SRS warning light not come on when you start the engine, this could mean that these systems are not available to help protect you in an accident, which could result in death or serious injury. Have the vehicle inspected by your Lexus dealer immediately if this occurs.

Indicators

The indicators inform the driver of the operating state of the vehicle's various systems.


Turn signal indicator (→P.179)


(U.S.A.)
Headlight indicator (→P.185)


(Canada)
Tail light indicator (→P.185)


Headlight high beam indicator (→P.187)


AHB indicator (→P.205)


(flashes)
Slip indicator *1 (→P.331)


VSC OFF indicator *1, 2 (→P.331)


High mode indicator (if equipped) (→P.328)


(U.S.A.)
Parking brake indicator (→P.180)


(Canada)
Parking brake indicator (→P.180)


Brake hold standby indicator *1 (→P.183)


Brake hold operated indicator *1 (→P.183)


Eco Driving Indicator Light *1 (→P.83)


Low outside temperature indicator *3 (→P.70)


Security indicator *4 (→P.61, 62)


"AIR BAG ON/OFF" indicator *1, 4 (→P.39)


PCS warning light *1, 2 (→P.217)


(green/white)
LTA indicator (→P.222)


(green/white)
LDA indicator (→P.229)


LDA OFF indicator *2 (if equipped) (→P.229)


(green/white)
PDA indicator (→P.236)


(green/white)
Dynamic radar cruise control indicator (→P.245)


(green/white)
Cruise control indicator (→P.252)


REC indicator (if equipped) (→P.262)


Outside rear view mirror indicators *5 (→P.264, 268, 281)


Intuitive parking assist OFF indicator *1, 2, 6 (if equipped) (→P.273)


Intuitive parking assist detection indicator*7 (if equipped) (→P.272)


Driving assist information indicator*1, 2 (→P.264, 268, 281, 286, 289)


Snow mode indicator (→P.176)


Custom mode indicator (if equipped) (→P.325)


Comfort mode indicator (if equipped) (→P.325)


Eco drive mode indicator (→P.325)


Sport mode indicator (if equipped) (→P.325)


Sport S mode indicator (if equipped) (→P.325)


Sport S+ mode indicator (if equipped) (→P.325)

*1: These lights come on when the engine switch is turned to IGNITION ON mode to indicate that a system check is being performed. They will turn off after the engine is started, or after a few seconds. There may be a malfunction in a system if the lights do not come on, or turn off. Have the vehicle inspected by your Lexus dealer.

*2: This light comes on when the system is turned off.

*3: When the outside temperature is so low that roads may be frozen, this indicator will flash for some seconds and then stay on.

*4: This light illuminates on the center panel.

*5: This light illuminates on the outside rear view mirrors.

*6: Vehicles without center display: The indicators turn off when the shift position is changed to R regardless of whether the intuitive parking assist function is turned on or off.

*7: Vehicles without center display or rear camera

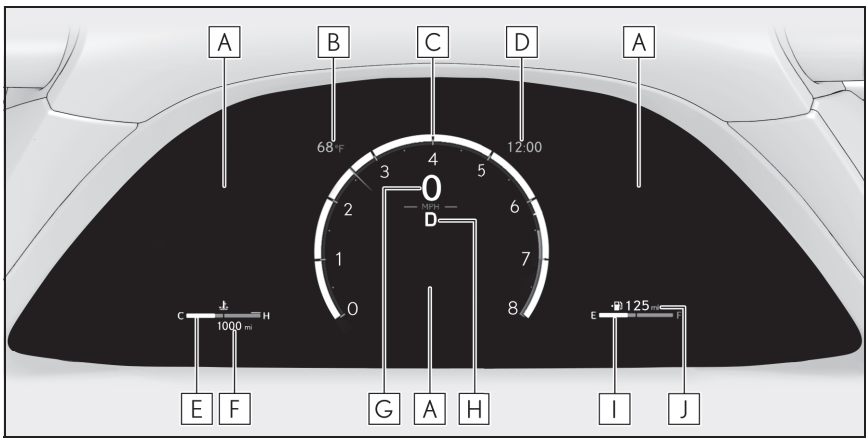
Gauges and meters

Meter display

■ Locations of gauges and meters

Depending on the settings and system operation, the meter displays or position of some gauges will change. The settings can be changed on the center display. (→P.511)

▶ 1-dial display state[*1]



The units used on the meters may differ depending on the target region.

A Multi-information display

Presents the driver with a variety of vehicle data (→P.77)
Displays warning messages if a malfunction occurs (→P.467)

B Outside temperature

Displays the outside temperature within the range of -40°F (-40°C) to 141°F (60°C)

C Analog speedometer/Tachometer[*2]

Tachometer: Displays the engine speed in revolutions per minute

- Rev indicator[*3]
- Rev peak[*3]

D Clock

Time displayed is linked to the analog clock on the center panel. (→P.379)

E Engine coolant temperature gauge

Displays the engine coolant temperature

F Odometer and trip meter display (→P.76)

G Digital speedometer

H Shift position/shift range/gear position indicator (→P.173)

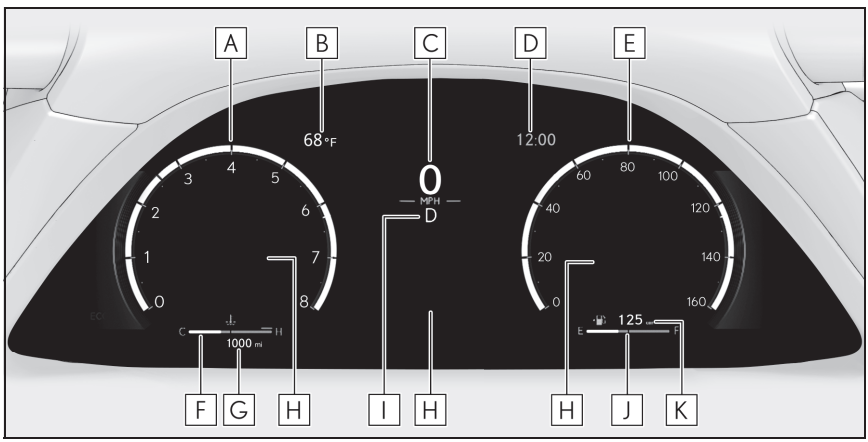
I Fuel gauge

Displays the quantity of fuel remaining in the tank

J Driving range

Displays driving range with remaining fuel.

▶ 2-dial display state*4



The units used on the meters may differ depending on the target region.

A Tachometer*2

Tachometer: Displays the engine speed in revolutions per minute

- Rev indicator*3
- Rev peak*3

This setting can be changed on the center display. (→P.511)

B Outside temperature

Displays the outside temperature within the range of -40°F (-40°C) to 141°F (60°C)

C Digital speedometer

D Clock

Time displayed is linked to the analog clock on the center panel. (→P.379)

E Analog speedometer*2

F Engine coolant temperature gauge

Displays the engine coolant temperature

G Odometer and trip meter display (→P.76)

H Multi-information display

Presents the driver with a variety of vehicle data (→P.77)
Displays warning messages if a malfunction occurs (→P.467)

I Shift position/shift range/gear position indicator (→P.173)

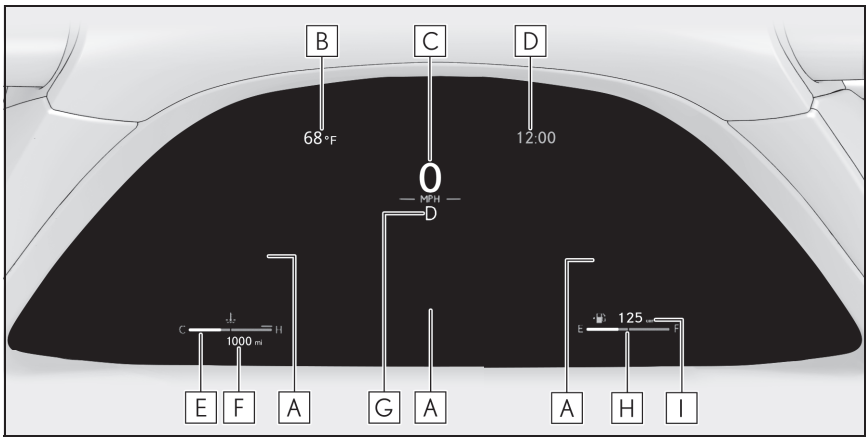
J Fuel gauge

Displays the quantity of fuel remaining in the tank

K Driving range

Displays driving range with remaining fuel.

▶ Non-dial display state *5, 6



The units used on the meters may differ depending on the target region.

A Multi-information display

Presents the driver with a variety of vehicle data (→P.77)
Displays warning messages if a malfunction occurs (→P.467)

B Outside temperature

Displays the outside temperature within the range of -40°F (-40°C) to 141°F (60°C)

C Digital speedometer

D Clock

Time displayed is linked to the analog clock on the center panel. (→P.379)

E Engine coolant temperature gauge

Displays the engine coolant temperature

F Odometer and trip meter display (→P.76)

G Shift position/shift range/gear position indicator (→P.173)

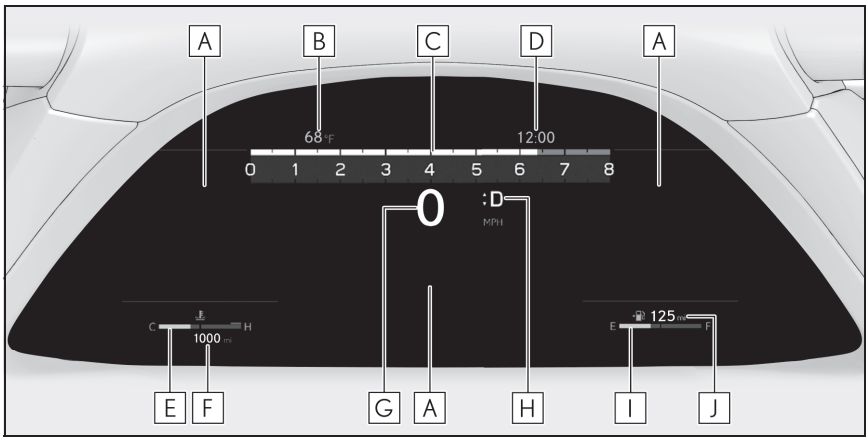
H Fuel gauge

Displays the quantity of fuel remaining in the tank

I Driving range

Displays driving range with remaining fuel.

▶ Bar display state*3, 6, 7



A Multi-information display

Presents the driver with a variety of vehicle data (→P.77)
Displays warning messages if a malfunction occurs (→P.467)

B Outside temperature

Displays the ambient temperature within the range of -40°F (-40°C) to 141°F (60°C).

C Tachometer*2

Displays the engine speed in revolutions per minute.
- Rev indicator
- Rev peak

D Clock

Time displayed is linked to the analog clock on the center panel. (→P.379)

E Engine coolant temperature gauge

Displays the engine coolant temperature

F Odometer and trip meter display (→P.76)

G Digital speedometer

H Shift position/shift range/gear position indicator (→P.173)

I Fuel gauge

Displays the quantity of fuel remaining in the tank.

J Distance to empty

Displays the driving range with remaining fuel.

*1: F SPORT models: Displayed when the meter display type setting is set to display type 1

and a driving mode other than sport mode is selected.

Except F SPORT models: Displayed when the meter display type setting is set to display type 1

*2: Depending on the item displayed on the multi-information display and the system operation state, meter will not be displayed.

*3: F SPORT models

*4: Displayed when the meter display type setting is set to display type 2.

*5: Except F SPORT models

*6: Displayed when the meter display type setting is set to display type 3.

*7: F SPORT models: Displayed when the meter display type setting is set to display type 1 and sport mode is selected.

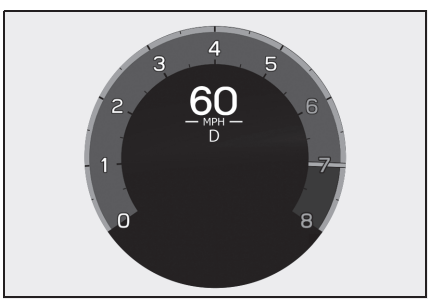
■ Rev indicator (F SPORT models)

When the engine speed reaches a set speed or the red zone, the tachometer will be highlighted.

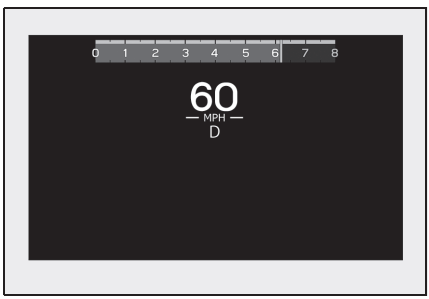
The indicators will be displayed in amber when the engine speed reaches a set speed, and in red when the engine speed reaches the red zone.

The engine speed at which the Rev indicator is displayed can be changed on the center display. (→P.511)

▶ Dial display state



▶ Bar display state

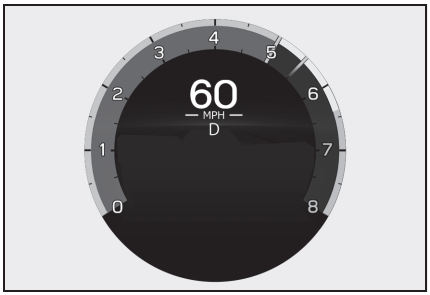


■ Rev peak (F SPORT models)

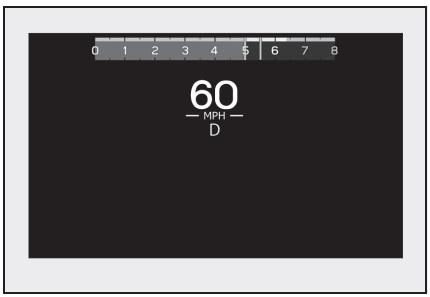
When the engine speed reaches or exceeds 5000 rpm, an afterimage of the tachometer will be displayed at the highest engine speed for approximately 1 second.

The engine speed at which the Rev peak is displayed can be changed on the center display. (→P.511)

▶ Dial display state



▶ Bar display state



Outside temperature display

- In the following situations, the correct outside temperature may not be displayed, or the display may take longer than normal to change:
  - When stopped, or driving at low speeds (less than 12 mph [20 km/h])
  - When the outside temperature has changed suddenly (at the entrance/exit of a garage, tunnel, etc.)
- When "--" or "E" is displayed, the system may be malfunctioning. Take your vehicle to your Lexus dealer.

Driving range

- Use the displayed values as a reference only.
- This distance is computed based on your average fuel consumption. As a result, the actual distance that can be driven may differ from that displayed.
- When only a small amount of fuel is added to the tank, the display may not be updated. When refueling, turn the engine switch off. If the vehicle is refueled without turning the engine switch off, the display may not be updated.

Liquid crystal display

Small spots or light spots may appear on the display. This phenomenon is characteristic of liquid crystal displays, and there is no problem continuing to use the display.

Free/Open Source Software Information

This product contains Free/Open Source Software (FOSS). The license information and/or the source code of such FOSS can be found at the following URL.

https://www.denso.com/global/en/opensource/meter/toyota/

Customization

The gauges and meters can be customized. (→P.511)

WARNING

The information display at low temperatures

Allow the interior of the vehicle to warm up before using the liquid crystal information display. At extremely low temperatures, the information display monitor may respond slowly, and display changes may be delayed.

For example, there is a lag between the driver's shifting and the new gear number appearing on the display. This lag could cause the driver to downshift again, causing rapid and excessive engine braking and possibly an accident resulting in death or injury.

NOTICE

To prevent damage to the engine and its components

- Do not let the indicator needle of the tachometer enter the red zone, which indicates the maximum engine speed.

NOTICE

- The engine may be overheating if the engine coolant temperature gauge is in the red zone (H); or "Engine Coolant Temp High Stop in a Safe Place See Owner's Manual" is shown on the multi-information display. In this case, immediately stop the vehicle in a safe place, and check the engine after it has cooled completely. (→P.484)

Odometer and trip meter display

Display items

- Odometer

Displays the total distance the vehicle has been driven.

- Trip meter A/Trip meter B

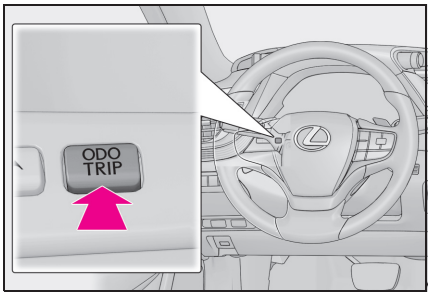
Displays the distance the vehicle has been driven since the meter was last reset. Trip meters A and B can be used to record and display different distances independently.

- Distance until next engine oil change

Displays the distance the vehicle can be driven until an oil change is necessary.

Changing the display

Each time the "ODO TRIP" switch is pressed, the displayed item will be changed. When the trip meter is displayed, pressing and holding the switch will reset the trip meter.



Using the voice control system*

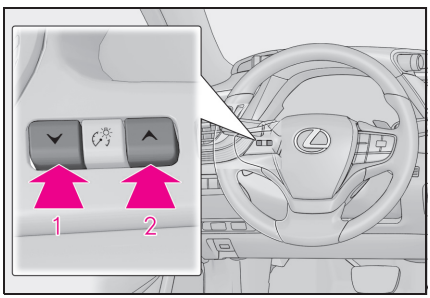
*: If equipped

Odometer and trip meter display can be changed using the voice control system.

For details, refer to the "MULTIMEDIA OWNER'S MANUAL"

Changing the instrument panel light brightness

The brightness of the instrument panel lights can be adjusted.



1 Darker

2 Brighter

Brightness of the meters (day mode and night mode)

The brightness of the meters is changed between day mode and night mode.

- Day mode: When the tail lights are off
- Night mode: When the tail lights are on and the surrounding area is dark

When the tail lights are on but the sur-

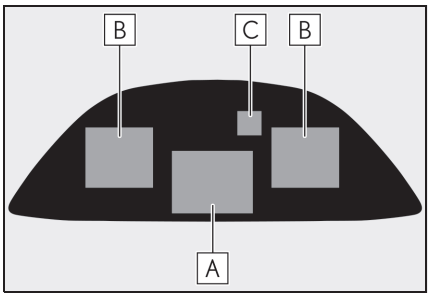
rounding area is bright, any adjustments made to the meter brightness levels will be applied to both modes at once.

Multi-information display

Displayed contents summary

Display area

A variety of driving-related information can be displayed. Depending on the situation, warning or advice pop-up displays will also be displayed.



A Content display area (center)

B Content display area (side)

C Driving support system status display area*

When driving support system information is not displayed in the content display area, if the driving support system operates, the system operating state will be displayed.

*: Depending on the settings and the system operation state, the position displayed may change.

Items displayed in the content display area

● Content display area (center)

- Driving support system information display (→P.87)
- Navigation system-linked display (if equipped) (→P.86)
- Message (→P.467)
- Blank

● Content display area (side)

- Blank
- Fuel consumption (→P.83)
- Eco Driving Indicator (→P.83)
- Driving support system information display (→P.87)
- Navigation system-linked display (if equipped) (→P.86)
- Audio system-linked display (→P.86)
- Drive information (→P.83)
- Boost gauge (→P.84)
- G-force (→P.84)
- Gear Position (→P.85)

■ **Liquid crystal display**

→P.75

WARNING

■ **Caution for use while driving**

● When operating the multi-information display while driving, pay extra attention to the safety of the area around the vehicle.

● Do not look continuously at the multi-information display while driving as you may fail to see pedestrians, objects on the road, etc. ahead of the vehicle.

■ **The information display at low temperatures**

→P.75

■ **Cautions during setting up the display**

As the engine needs to be running during setting up the display, ensure that the vehicle is parked in a place with adequate ventilation. In a closed area such as a garage, exhaust gases including harmful carbon monoxide (CO) may collect and enter the vehicle. This may lead to death or a serious health hazard.

NOTICE

■ **While setting up the display**

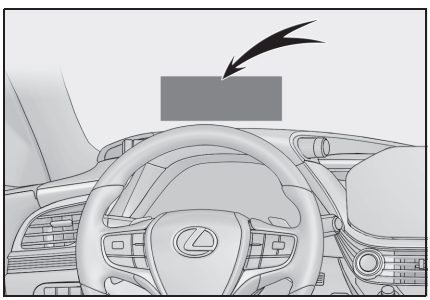
To prevent battery discharge, ensure that the engine is running while setting up the display features.

Head-up display*

*: If equipped

The head-up display projects a variety of driving-related information and the operating state of the driving support systems on the windshield. The content displayed will differ according to the driving conditions and display mode of the head-up display. Depending on the situation, pop-up displays will also be displayed.

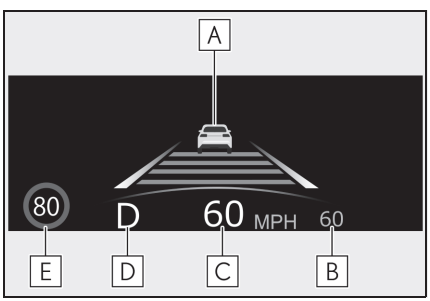
System components



The display mode of the head-up display can be selected from the following;

The setting can be changed on the center display. (→P.511)

● Full



These images are examples only, and may vary slightly from actual conditions.

A Content display area

- Driving support system information display (→P.87)
- Tachometer

Displays the engine speed in revolutions per minute

- Eco Driving Indicator (→P.83)

B Driving support system information display (→P.87)

C Speedometer

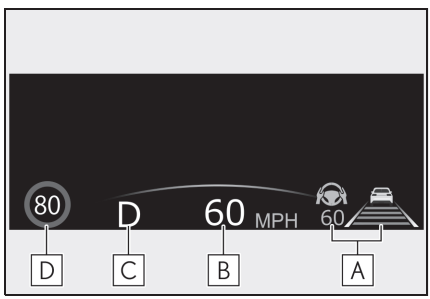
D Shift position/shift range/gear position indicator (→P.173)

E Speed limit/RSA (Road Sign Assist) display area (if equipped)

Displays the following items:

- Speed limit of the current road (linked to the navigation system) (U.S.A. only)
- RSA (Road Sign Assist) display (→P.241)

● Standard



These images are examples only, and may vary slightly from actual conditions.

A Driving support system information display (→P.87)

B Speedometer

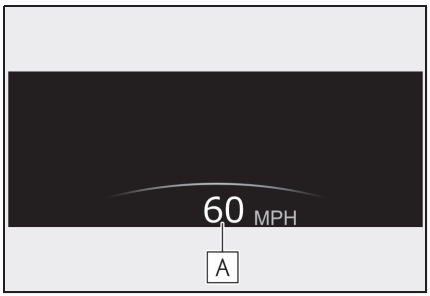
C Shift position/shift range/gear position indicator (→P.173)

D Speed limit/RSA (Road Sign Assist) display area (if equipped)

Displays the following items:

- Speed limit of the current road (linked to the navigation system) (U.S.A. only)
- RSA (Road Sign Assist) display (→P.241)

● Minimal



These images are examples only, and may vary slightly from actual conditions.

A Speedometer

■ Head-up display

The head-up display may seem dark or hard to see when viewed through sunglasses, especially polarized sunglasses. Adjust the brightness of the head-up display or remove your sunglasses.

■ Eco Driving Indicator or tachometer is displayed when

When the following conditions are met, the tachometer *1 or eco driving indicator *2 will be displayed on the head-up display.

- Full mode (→P.79) is selected as head-up display type.
- LTA (Lane Tracing Assist) is disabled. (→P.221)
- LDA (Lane Departure Alert) is disabled. (→P.229)
- The cruise control, selected by pressing the driving assist mode select switch, is canceled. (→P.252, 253)
- F SPORT models: The meter display type setting is set to display type 2 or a shift position other than M is selected when the meter display type setting is set to display type 1 or 3

*1: A driving mode other than eco drive mode is selected.

*2: The driving mode is set to eco drive mode.

WARNING

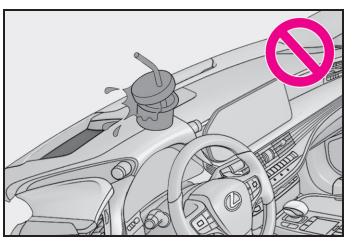
■ Before using the head-up display

- Check that the position and brightness of the head-up display image does not interfere with safe driving. Incorrect adjustment of the image's position or brightness may obstruct the driver's view and lead to an accident, resulting in death or serious injury.
- Do not continuously look at the head-up display while driving as you may fail to see pedestrians, objects on the road, etc. ahead of the vehicle.

NOTICE

■ To prevent damage to components

- Do not place any drinks near the head-up display projector. If the projector gets wet, electrical malfunctions may result.

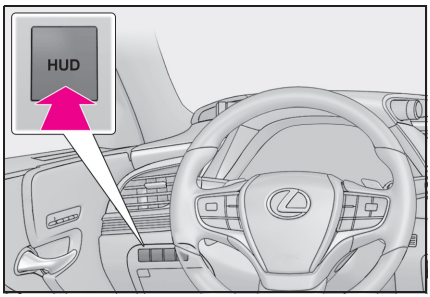


- Do not place anything on or put stickers onto the head-up display projector. Doing so could interrupt head-up display indications.
- Do not touch the inside of the head-up display projector or thrust sharp edges or the like into the projector. Doing so could cause mechanical malfunctions.

Changing settings of the head-up display

■ Enabling/disabling the head-up display

Press the HUD switch.



■ Enabling/disabling of the head-up display

If the head-up display is disabled, it will remain disabled when the engine switch is turned off then back to IGNITION ON mode.

■ Display brightness

In addition to the brightness setting, the brightness of the display will change automatically according to the ambient brightness.

■ Head-up display automatic position adjustment

If the display position is recorded into memory, the head-up display will be automatically adjusted to the desired position. (→P.124)

■ Using the voice control system*

*: If equipped

The head-up display can be enabled and disabled using the voice control system.

For details, refer to the "MULTIMEDIA OWNER'S MANUAL".

■ Customization

Some functions can be customized. (→P.511)

WARNING

■ Caution for changing settings of the head-up display

As the engine needs to be running while changing the settings of the head-up display, ensure that the vehicle is parked in a place with adequate ventilation. In a closed area such as a garage, exhaust gases including harmful carbon monoxide (CO) may collect and enter the vehicle. This may lead to death or a serious health hazard.

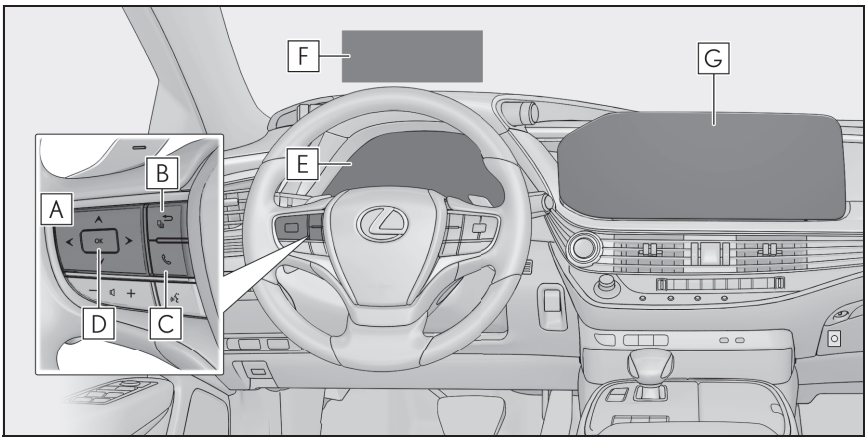
NOTICE

■ When changing the settings of the head-up display

To prevent battery discharge, ensure that the engine is running while the changing the settings of the head-up display.

Displayed content

Components/Operations



A ＜ / ＞ : Change the screen and move the cursor

＾ / ˅ : Change displayed content, scroll up/down the screen

B Return to the previous screen

C Start/receive call

Linked with the hands-free system, sending or receiving call is displayed. For details regarding the hands-free system, refer to the "MULTIMEDIA OWNER'S MANUAL".

D Press: Enter/Set

Press and hold: Reset/Display customizable items, display the cursor

E Multi-information display

F Head-up display (if equipped)

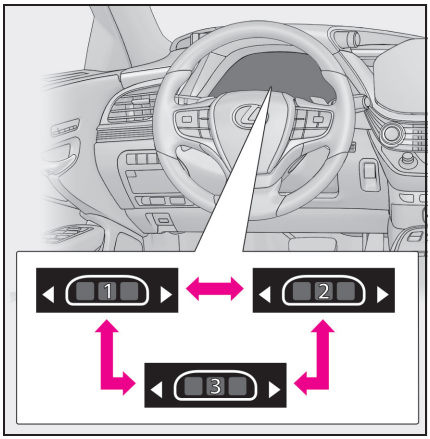
G Center display

Changing the display of the multi-information display

■ Changing meter pages

The meter page (comprised of 3 content areas) for the display of the multi-information display can be selected from 3 meter pages.

Press the ＜ or ＞ of meter control switch to change the meter page.



Changing the items displayed on each content area

The item displayed on each content area (left/center/right) can be changed separately.

1 Press the < or > of meter control switch to select a page.

2 Press and hold "OK" to display the cursor on the content display area (center).

3 Press the < or > to move the cursor and select the content display area.

4 Press ∧ or ∨ to select the item.

Fuel consumption

The following items can be displayed on the multi-information display.

Use the displayed values as a reference only.

- Current fuel consumption

Displays instantaneous current fuel consumption

- Average fuel consumption*

*: Average fuel economy will be reset when the reset operation is performed on the history screen of the center display. (→P.85)

Drive information

The following items can be displayed on the multi-information display.

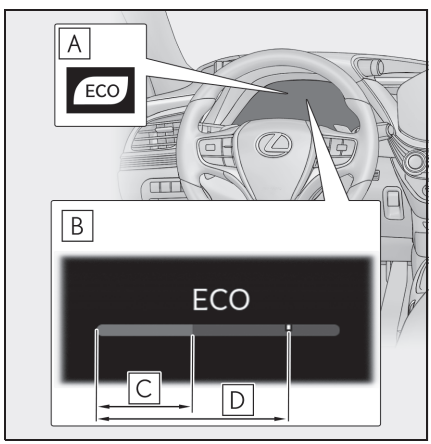
- Average vehicle speed*
- Total driving time*

*: Average vehicle speed and total driving time will be reset when the reset operation is performed on the history screen of the center display. (→P.85)

Eco Driving Indicator

Eco Driving Indicator can be displayed on the multi-information display and the head-up display (if equipped).

This illustration is for explanation only and may differ depending on the specifications of the vehicle.



A Eco Driving Indicator Light

During Eco-friendly acceleration (Eco driving), the Eco Driving Indicator Light will turn on. When the acceleration exceeds the Zone of Eco driving, or when the vehicle is stopped, the light turns off.

B Eco Driving Indicator Zone Display

Suggests the Zone of Eco driving with current Eco driving ratio based on acceleration.

C Eco driving ratio based on acceleration

If the acceleration exceeds the Zone of Eco driving, the right side of the Eco Driving Indicator Zone Display will illuminate.

At this time, the Eco Driving Indicator Light will turn off.

D Zone of Eco driving

■ Eco Driving Indicator

Eco Driving Indicator will not operate under the following conditions:

- The shift position is in any position other than D.
- A paddle shift switch is operated.
- The driving mode is set to sport mode.
- Vehicles with Adaptive Variable Suspension System: The driving mode is set to custom mode and the powertrain control is set to power. (→P.520)
- Snow mode is selected.
- The vehicle speed is approximately 80 mph (130 km/h) or higher.

Boost gauge

Boost gauge can be displayed on the multi-information display.

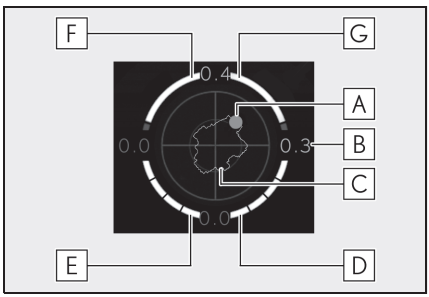
Displays the boost pressure. The display will change color if the specified pressure is exceeded.

This display is intended for use as a guideline. Depending on factors such as the road surface condition, temperature and vehicle speed, the display may not show the actual condition of the vehicle.

G-force

Displays lateral G-forces on the vehicle on the multi-information display.

Displays around the periphery of the G-force display, the left and right steering amount, accelerator pedal input, and brake fluid pressure.



A Acceleration G-force on the vehicle

B Current G-force value (analyzed value of front/rear and left/right G-forces)

C Record of the maximum G-forces

D Accelerator pedal input

E Brake fluid pressure

F Left steering amount

G Right steering amount

This display is intended for use as a guideline. Depending on factors such as the road surface condition, temperature and vehicle speed, the display may not show the actual condition of the vehicle.

- Resetting the record of maximum G-forces

The display is reset each time the engine is started.

Press and hold "OK" of the meter control switch to reset the record.

● Peak hold function

When more than a certain amount of force is applied, the G-force value display will be retained for a few seconds.

■ G-force display

- The G-force values may not be zero even when the vehicle is parked, such as when it is parked on an incline.
- Depending on the vehicle usage conditions, the brake fluid pressure display may not reach its maximum reading even though the brake pedal is fully depressed.
- If a battery terminal is disconnected and reconnected, the steering amount display may be disabled temporarily. After driving the vehicle for a while, the display will be enabled.

Gear Position

Displays the current shift range or gear position when the shift position is in D or M.

Blank (No items)

Displays no drive information contents on the multi-information display.

Current fuel consumption/history screen

Fuel consumption information can be displayed on the center display.

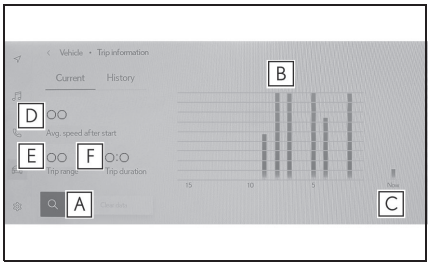
■ **Displaying fuel consumption/history screen on the center display**

1 Select on the main menu.

2 Select "Trip information".

3 Select "Current" or "History".

■ **Current fuel consumption screen**



A Resetting the history data

B Fuel consumption in the past 15 minutes

C Current fuel consumption

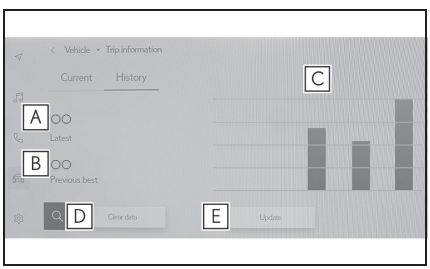
D Average vehicle speed since the engine was started.

E Trip range

F Elapsed time since the engine was started.

Use the displayed average fuel consumption as a reference. The image is an example only, and may vary slightly from actual conditions.

■ **History fuel consumption screen**



A Latest fuel consumption

B Best recorded fuel consumption

C Previous fuel consumption record

D Resetting the history data

E Updating the latest fuel consumption data

Use the displayed average fuel consumption as a reference. The image is an example only, and may vary slightly from actual conditions.

■ **Updating the history data**

Update the latest fuel consumption by selecting "Update" to measure the current fuel consumption again.

■ **Resetting the data**

The fuel consumption data can be deleted by selecting "Clear data".

■ **Trip range**

Displays the estimated maximum distance that can be driven with the quantity of fuel remaining.

This distance is computed based on your average fuel consumption.
As a result, the actual distance that can be driven may differ from that displayed.

AWD operation status display (AWD models)

AWD operation status display can be displayed on the center display.

■ **Displaying AWD operation status display on the center display**

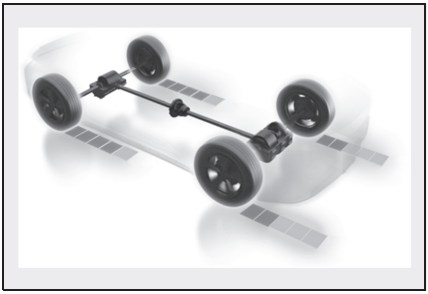
1 Select on the main menu.

2 Select "All wheel drive".

■ **AWD operation status**

Torque distribution display: Displays the drive status of each wheel in 6 steps from 0 to 5.

The illustration used is intended as an example, and may differ from the image that is actually displayed on the center display.



Tire pressure

The tire pressure detected by the tire pressure warning system can be displayed on the center display.

■ **Displaying the tire pressure on the center display**

1 Select on the main menu.

2 Select "Tire pressure".

■ **Tire inflation pressure**

→P.422

Audio system-linked display

The operating conditions of the audio system can be displayed on the multi-information display.

Navigation system-linked display (if equipped)

The following information is displayed on the multi-information display.

- Route guidance to destination
- Speed limit of the current road (linked to the navigation system) (U.S.A. only)
- Street name

- Compass

Driving support system information display

The operating state of the following systems can be displayed on the multi-information display or head-up display (if equipped).

- Dynamic radar cruise control (→P.242)
- Cruise control (→P.252)
- LTA (Lane Tracing Assist) (→P.218)
- LDA (Lane Departure Alert) (→P.226)
- LCA (Lane Change Assist) (if equipped) (→P.223)
- RSA (Road Sign Assist) (if equipped) (→P.240)
- PDA (Proactive Driving Assist) (→P.232)
- PCS (Pre-Collision System) (→P.208)

Pop-up display information

Pop-up displays will be displayed on the multi-information display or the head-up display (if equipped) when necessary.

When a pop-up display is displayed, a current display may no longer be displayed. In this case, the display will return after the pop-up display disappears.

Driving support systems

Displays a warning/suggestion/advice message or the operating state of a relevant system.

- Dynamic radar cruise control
- Cruise control
- LTA (Lane Tracing Assist)
- LDA (Lane Departure Alert)
- LCA (Lane Change Assist) (if equipped)
- PDA (Proactive Driving Assist)
- PCS (Pre-Collision System)
- RSA (Road Sign Assist) (if equipped)
- SEA (Safe Exit Assist)
- FCTA (Front Cross Traffic Alert) (if equipped)

Warning message

Some warning messages are displayed when necessary, according to certain conditions.

Hands-free system status

Displayed when the hands-free system is operated.

Suggestion function

Displays suggestions to the driver in the following situations. To select a response to a displayed suggestion, use the meter control switches.

Steering wheel switch operation display

Displayed when an audio remote control switch or a talk switch on the steering wheel is operated.

Navigation system-linked information (if equipped)

Depending on the situation, navigation

system-linked route guidance to destination may be displayed.

Items displayed when the engine switch is turned off

The following items will be displayed on the multi-information display when the engine switch is turned off.

- Average fuel consumption since starting*
- Distance driven since starting*
- Driving time since starting*

*: It is reset each time the engine stops.

3-1. Key information

Keys 90

Digital Key 94

3-2. Opening, closing and locking the doors and trunk

Doors 96

Trunk 101

Smart access system with push-button start 108

3-3. Adjusting the seats

Front seats 113

Power rear seat 119

Driving position memory 124

Rear seat position memory 128

Head restraints 129

3-4. Adjusting the steering wheel and mirrors

Steering wheel 133

Inside rear view mirror 134

Digital Rear-view Mirror 135

Outside rear view mirrors 143

3-5. Opening, closing the windows and moon roof

Power windows 146

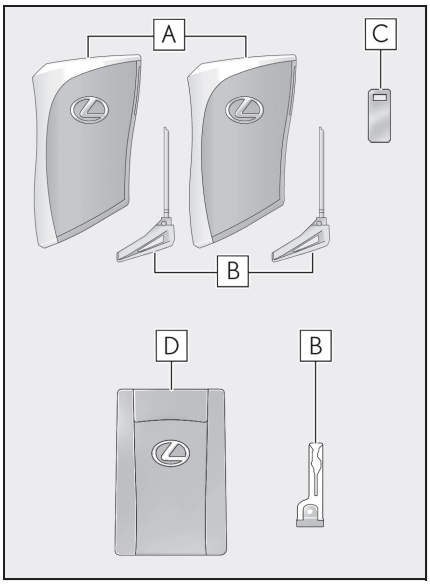
Moon roof 149

Panoramic moon roof 151

Keys

The keys

The following keys are provided with the vehicle.



A Electronic keys

- Operating the smart access system with push-button start (→P.108)
- Operating the wireless remote control function (→P.92)

B Mechanical keys

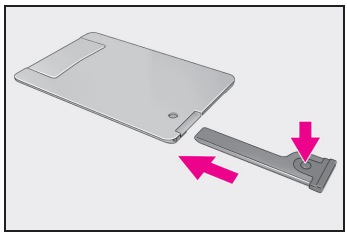
C Key number plate

D Card key (electronic key) (if equipped)

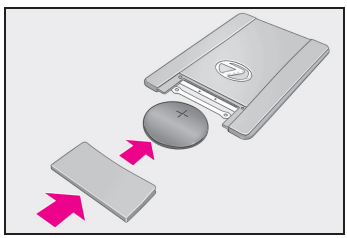
Operating the smart access system with push-button start (→P.108)

Card key (if equipped)

- The card key is not waterproof.
- The mechanical key that is stored inside the card key should be used only if a problem arises, such as when the card key does not operate properly.
- If it is difficult to take out the mechanical key, push down the lock release button using a pen tip etc. If it is still difficult to pull it out, use a coin etc.
- To store the mechanical key in the card key, insert it while pressing the lock release button.



- If the battery cover is not installed and the battery falls out or if the battery was removed because the key got wet, reinstall the battery with the positive terminal facing the Lexus emblem.



When riding in an aircraft

When bringing an electronic key onto an aircraft, make sure you do not press any buttons on the electronic key while inside the aircraft cabin. If you are carrying an electronic key in your bag etc., ensure that the buttons are not likely to be pressed accidentally. Pressing a button may cause the electronic key to emit radio waves that could interfere with the operation of the aircraft.

Electronic key battery depletion

- The standard battery life is 1 to 2 years. (The card key battery life is about a year and a half.)
- If the battery becomes low, an alarm will sound in the cabin and a message will be shown on the multi-information display when the engine is stopped.

- To reduce key battery depletion when the electronic key is to not be used for long periods of time, set the electronic key to the battery-saving mode. (→P.110)
- As the electronic key always receives radio waves, the battery will become depleted even if the electronic key is not used. The following symptoms indicate that the electronic key battery may be depleted. Replace the battery when necessary.
  - The smart access system with push-button start or the wireless remote control does not operate.
  - The detection area becomes smaller.
  - The LED indicator on the key surface does not turn on.
- To avoid serious deterioration, do not leave the electronic key within 3 ft. (1 m) of the following electrical appliances that produce a magnetic field:
  - TVs
  - Personal computers
  - Cellular phones, cordless phones and battery chargers
  - Recharging cellular phones or cordless phones
  - Table lamps
  - Induction cookers
- If the electronic key is near the vehicle for longer than necessary, even if the smart access system with push-button start is not used, the key battery may become depleted faster than normal. When not using the smart access system with push-button start, it is recommended not to stay with the electronic key near the vehicle longer than necessary.

■ Replacing the battery

→P.439

■ Confirmation of the number of registered keys

The number of keys already registered to the vehicle can be confirmed. Ask your Lexus dealer for details.

■ If "A New Key has been Registered Contact Your Dealer for Details" is shown on the multi-information display

This message will be displayed each time the driver's door is opened when the doors are unlocked from the outside for approximately 10 days after a new electronic key has been registered.
If this message is displayed but you have not had a new electronic key registered, ask your Lexus dealer to check if an unknown electronic key (other than those in your possession) has been registered.

NOTICE

■ To prevent key damage

- Do not drop the keys, subject them to strong shocks or bend them.
- Do not expose the keys to high temperatures for a long period of time.
- Do not get the keys wet or wash them in an ultrasonic washer etc.
- Do not attach metallic or magnetic materials to the keys or place the keys close to such materials.
- Do not disassemble the keys.
- Do not attach a sticker or anything else to the surface of the electronic key.
- Do not place the keys near objects that produce magnetic fields, such as TVs, audio systems and induction cookers, or medical electrical equipment, such as low-frequency therapy equipment.

■ Carrying the electronic key on your person

Carry the electronic key 3.9 in. (10 cm) or more away from electric appliances that are turned on. Radio waves emitted from electric appliances within 3.9 in. (10 cm) of the electronic key may interfere with the key, causing the key to not function properly.

■ In case of a smart access system with push-button start malfunction or other key-related problems

→P.475

NOTICE

■ When an electronic key is lost

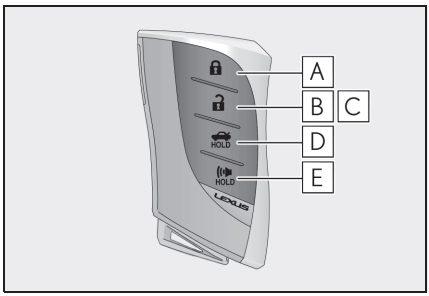
→P.474

■ Handling the card key (if equipped)

- Do not apply excess force when inserting the mechanical key into the card key. Doing so may damage the card key.
- If the battery or card key terminals get wet, the battery may corrode and the card key may stop working.
  If the key is dropped into water, or if drinking water, etc. is spilled on the key, immediately remove the battery cover and wipe the battery and terminals. (To remove the battery cover, lightly grasp and pull it.) If the battery is corroded, have your Lexus dealer replace the battery.
- Do not crush the battery cover or use a screwdriver to remove the battery cover.
  Forcibly removing the battery cover may bend or damage the key.
- If the battery cover is frequently removed, the battery cover may become loose.
- When installing the battery, make sure to check the direction of the battery. Installing the battery in the wrong direction may cause the battery to deplete rapidly.
- The surface of the card key may be damaged, or its coating may peel off in the following situations:
  - The card key is carried together with hard objects, such as coins and keys.
  - The card key is scraped with a sharp object, such as the tip of a mechanical pencil.
  - The surface of the card key is wiped with thinner or benzene.

Wireless remote control

The electronic keys are equipped with the following wireless remote control:



A Locks the doors (→P.96)

B Unlocks the doors (→P.96)

C Opens the windows *1 and moon roof *1, 2 or panoramic moon roof *1, 2 (→P.96)

D Opens the trunk (→P.104)

E Sounds the alarm

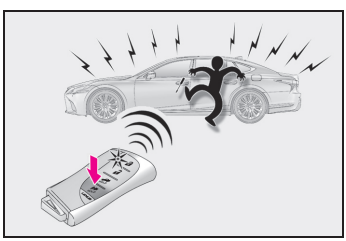
*1: This setting must be customized at your Lexus dealer.

*2: If equipped

■ Theft deterrent panic mode

When is pressed for longer than about one second, an alarm will sound intermittently and the vehicle lights will flash to deter any person from trying to break into or damage your vehicle.

To stop the alarm, press any button on the electronic key.

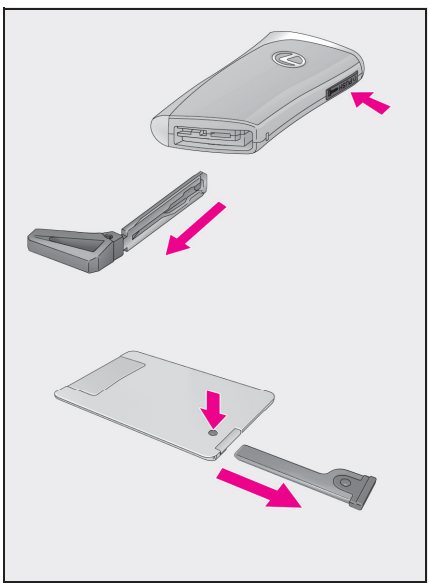


Using the mechanical key

To take out the mechanical key, push the release button and take the key out.

The mechanical key can only be inserted in one direction, as the key only has grooves on one side. If the key cannot be inserted in a lock cylinder, turn it over and re-attempt to insert it.

After using the mechanical key, store it in the electronic key. Carry the mechanical key together with the electronic key. If the electronic key battery is depleted or the entry function does not operate properly, you will need the mechanical key. (→P.475)



When required to leave the vehicle's key with a parking attendant

Turn the trunk opener main switch off (→P.107) and lock the glove box (→P.364) as circumstances demand.
Remove the mechanical key for your own use and provide the attendant with the electronic key only.

If you lose your mechanical keys

→P.474

If a wrong key is used

The key cylinder rotates freely, isolated from the internal mechanism.

Digital Key*

*: If equipped

A smartphone can be used instead of the electronic key of the vehicle by installing the dedicated Digital Key App on a smartphone. Also, Digital Key can be shared with your family or friends using the Digital Key App.

■ Free/open source software information

This product contains Free/open source software (FOSS). License information and/or the source code of this FOSS can be obtained at the following URL:

https://www.denso.com/global/en/opensource/dkey/toyota/

Digital key usage conditions

In order to use the Digital Key, you need to install the Lexus App. Register the Vehicle to the customer's Lexus App profile, and subscribe to Remote Services, and enroll in Digital Key.

Digital key precautions

- A Digital Key can be used when the smartphone and server can communicate. The Digital Key may become unusable if the smartphone is not connected to the Internet. Be sure to carry the electronic key of the vehicle if traveling to a location with unreliable communications.
- If the smartphone battery is depleted, the smartphone cannot be used as Digital Key. If the battery level is low, be sure to charge the smartphone prior to going out.
- The Digital Key system is related to the smart access system with push-button start. If the smart access system with push-button start has been deactivated in the vehicle customization setting, the Digital Key will also be disabled.
- Depending on the radio wave environment, the Digital Key may not be able to be used. (→P.108)
- When transferring vehicle ownership, make sure to delete the Digital Keys.
- If the vehicle is not operated for 14 days or more, the Digital Key will not connect automatically. Therefore, it may take some time before the system operates after a door handle is touched.
- A part of the services may be stopped for a certain period of time due to server maintenance. However, registered Digital Keys can be used during the maintenance.
- A smartphone with the Digital Key App enabled will be able to lock and unlock the doors, start the engine and perform any other operations as same as the electronic key of the vehicle. Be especially careful not to lose the smartphone or allow it to be stolen.

If the smartphone is lost or stolen, contact your Lexus dealer immediately.

- When taking your vehicle to a Lexus dealer for an inspection or repairs,

make sure to bring an electronic key.

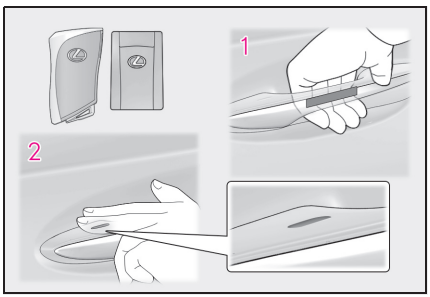
- With the digital key alone, no vehicle lights will illuminate when approached to the vehicle.

Doors

Unlocking and locking the doors from the outside

■ Smart access system with push-button start

Carry the electronic key to enable this function.



1 Grip the driver's door handle to unlock the door. Holding the driver's door handle for approximately 2 seconds unlocks all the doors. Grip any passenger door handle to unlock all the doors.*

Make sure to touch the sensor on the back of the handle.

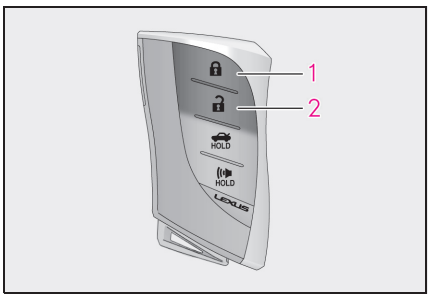
The doors cannot be unlocked for 3 seconds after the doors are locked.

*: The door unlock settings can be changed.

2 Touch the lock sensor (indentation on the upper part of the door handle) to lock all the doors.

Check that the door is securely locked.

■ Wireless remote control



1 Locks all the doors

Check that the door is securely locked.

2 Unlocks all the doors

Pressing the button unlocks the driver's door. Pressing the button again within 5 seconds unlocks the other door.

Press and hold to open the windows*1 and moon roof*1,2 or panoramic moon roof*1,2.

*1: This setting must be customized at your Lexus dealer.

*2: If equipped

■ Switching the door unlock function

It is possible to set which doors the entry function unlocks using the wireless remote control.

1 Turn the engine switch off.

2 When the indicator light on the key surface is not on, press and hold , or for approximately 5 seconds while pressing and holding .

The setting changes each time an operation is performed, as shown below. (When changing the setting continuously, release the buttons, wait for at least 5 seconds, and repeat step **2**.)

Multi-information display/Beep	Unlocking function
 Exterior: Beeps 3 times Interior: Pings once	Holding the driver's door handle unlocks only the driver's door.
	Holding any of the passenger door handles unlocks all the doors.
 Exterior: Beeps twice Interior: Pings once	Holding a door handle unlocks all the doors.

To prevent unintended triggering of the alarm, unlock the doors using the wireless remote control and open and close a door once after the settings have been changed. (If a door is not opened within 60 seconds after is pressed, the doors will be locked again and the alarm will automatically be set.)
In a case that the alarm is triggered, immediately stop the alarm. (→P.62)

■ **Impact detection door lock release system**

In the event that the vehicle is subject to a strong impact, all the doors are unlocked. Depending on the force of the impact or the type of accident, however, the system may not operate.

■ **Operation signals**

A buzzer sounds and the emergency flashers flash to indicate that the doors have been locked/unlocked. (Locked: once; Unlocked: twice)

A buzzer sounds to indicate that the windows and moon roof or panoramic moon roof are operating.

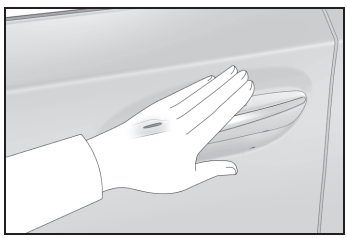
■ **Security feature**

If a door is not opened within approximately 60 seconds after the vehicle is unlocked, the security feature automatically locks the vehicle again.

■ **When the doors cannot be locked by the lock sensor on the upper part of the door handle**

When the doors cannot be locked even if the lock sensor on the upper part of the door handle is touched by a finger, touch the lock sensor with the palm.

If you are wearing gloves, remove them.



■ **Open door warning buzzer**

If an attempt to lock the doors is made when a door is not fully closed, a buzzer sounds continuously for 5 seconds. Fully close the door to stop the buzzer, and lock the vehicle once more.

■ **Setting the alarm**

Locking the doors will set the alarm system. (→P.62)

■ **Conditions affecting the operation of the smart access system with push-button start or wireless remote control**

→P.110

■ **If the smart access system with push-button start or the wireless remote control does not operate properly**

Use the mechanical key to lock and unlock the doors. (→P.475)
Replace the key battery with a new one if it is depleted. (→P.439)

■ **If the battery is discharged**

The doors cannot be locked and unlocked using the smart access system with push-button start or wireless remote control. Lock or unlock the doors using the mechanical key. (→P.475)

Rear seat reminder function

As the first reminder so as not to forget luggage, etc. in the rear seat, when the engine switch is turned off after any of the following conditions are met, a buzzer will sound and a message will be displayed on the multi-information display for approximately 6 seconds.

Also, as the second reminder, when the doors are locked, a buzzer will sound and the emergency flashers will flash for a few seconds, and a message will be displayed on the multi-information display

- The engine is started within approximately 10 minutes after opening and closing a rear door.
- A rear door has been opened and closed after the engine was started.

The second reminder will not be activated if a rear door was opened before the doors are locked.

However, if a rear door is opened and then closed within approximately 2 seconds, the rear seat reminder function may not operate.

The rear seat reminder function determines that luggage, etc. has been placed in a rear seat based on opening and closing of a rear door. Therefore, depending on the situation, the rear seat reminder function may not operate and you may still forget luggage, etc. in the rear seat, or it may operate unnecessarily.

Customization

Some functions can be customized.
(→P.510)

WARNING

To prevent an accident

Observe the following precautions while driving the vehicle.
Failure to do so may result in a door opening and an occupant throwing out of the vehicle, resulting in death or serious injury.

- Ensure that all doors are properly closed and locked.
- Do not pull the inside handle of the doors while driving.

Be especially careful for the front doors, as the doors may be opened even if the inside lock buttons are in locked position.

- Set the rear door child-protector locks when children are seated in the rear seats.

When opening or closing a door

Check the surroundings of the vehicle such as whether the vehicle is on an incline, whether there is enough space for a door to open and whether a strong wind is blowing. When opening or closing the door, hold the door handle tightly to prepare for any unpredictable movement.

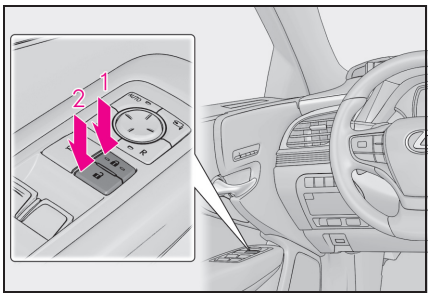
Vehicle height control precautions (vehicles with electronically modulated air suspension)

In the following situations, make sure to check the safety of the area around the vehicle, as the vehicle height may change and part of someone's body may be caught in the vehicle, possibly causing injury or the vehicle may be damaged.

- When opening or closing a door
- When locking the doors

Unlocking and locking the doors from the inside

■ Door lock switches (to lock/unlock)

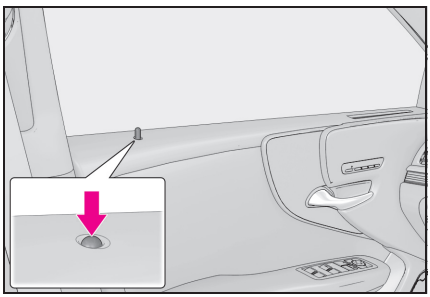


1 Locks all the doors

2 Unlocks all the doors

■ Inside lock buttons (to lock)

Push down the inside lock button to lock the door.



■ Inside door handles (to unlock)

▶ For the front doors

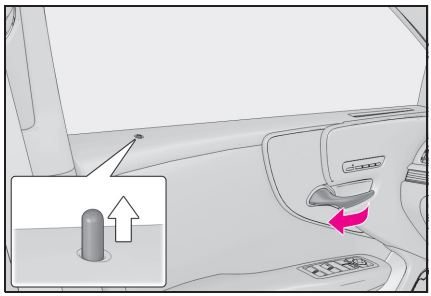
Pull the handle to unlock and open the door.

When the door is unlocked, the inside lock button will pop up.

▶ For the rear doors

Pull the handle to unlock the door. Pull the handle a second time to open the door.

When the door is unlocked, the inside lock button will pop up.



■ Locking the front doors from the outside without a key

1 Push down the inside lock button.

2 Close the door.

The door cannot be locked if the engine switch is in ACCESSORY or IGNITION ON mode, or the electronic key is left inside the vehicle. However, the key may not be detected correctly and the door may be locked.

■ Door closer (if equipped)

In the event that a door is left slightly open, the door closer will automatically close it to the fully closed position.

- The door closer will operate regardless of the engine switch mode.
- The door closer will not function if the door has been closed while pulling the inside or outside door handle.
- The door can be opened by pulling the inside or outside door handle, even when the door closer is operating (except when the lock button is in the lock position or the child-protector lock is set).
- A motor sound may be heard for several seconds after the door closer closes the door. This does not indicate a malfunction.

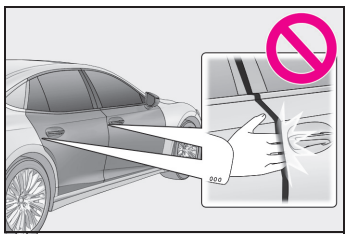
■ Open door warning buzzer

If a door or the trunk is not fully closed, a buzzer will sound when the vehicle speed reaches 3 mph (5 km/h).
The open door(s) or trunk is indicated on the multi-information display.

WARNING

■ Door closer (if equipped)

In the event that a door is left slightly open, the door closer will automatically close it to the fully closed position. It takes several seconds before the door easy closer begins to operate.
If the child-protector lock is set, the door closer will not stop during operation even if an attempt is made to open the door from inside the vehicle. Be careful not to catch fingers or anything else in the door. Failure to do so may result in serious injury.



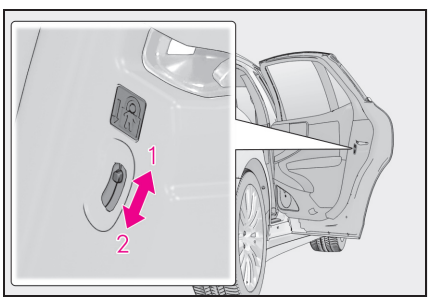
NOTICE

■ To prevent door closer malfunction (if equipped)

Do not frequently repeat opening and closing of doors, or apply excessive force to a door while the door closer is operating.

Rear door child-protector lock

The door cannot be opened from inside the vehicle when the lock is set.



1 Unlock
2 Lock

These locks can be set to prevent children from opening the rear doors. Push down on each rear door switch to lock both rear doors.

Automatic door locking and unlocking systems

The following functions can be set or canceled:

For instructions on customizing, refer to P.510.

Function	Operation
Speed linked door locking function	All doors are automatically locked when vehicle speed is approximately 12 mph (20 km/h) or higher.
Shift position linked door locking function	All doors are automatically locked when the shift position is shifted to a position other than P.
Shift position linked door unlocking function	All doors are automatically unlocked when the shift position is shifted to P.
Driver's door linked door unlocking function	All doors are automatically unlocked when driver's door is opened within approximately 45 seconds after turning the engine switch off.

Trunk

The trunk can be opened using the trunk opener switch, entry function or wireless remote control.

If the vehicle is equipped with a power trunk opener and closer, the trunk can be closed using the trunk closer.

⚠ WARNING

Observe the following precautions. Failure to do so may result in death or serious injury.

■ Before driving

- Make sure that the trunk lid is fully closed. If the trunk lid is not fully closed, it may open unexpectedly while driving and hit near-by objects or luggage in the trunk may be thrown out, causing an accident.
- Do not allow children to play in the trunk.
  If a child is accidentally locked in the trunk, they could suffer from heat exhaustion, suffocation or other injuries.
- Do not allow a child to open or close the trunk lid.
  Doing so may cause the trunk lid to open unexpectedly, or cause the child's hands, head, or neck to be caught by the closing trunk lid.

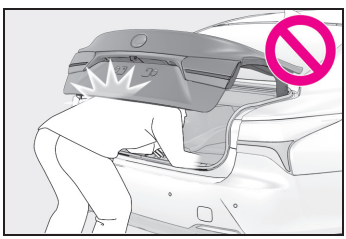
■ Important points while driving

Never let anyone sit in the trunk. In the event of sudden braking or a collision, they are susceptible to death or serious injury.

■ Using the trunk

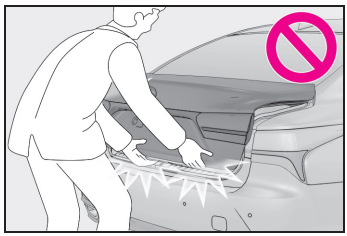
Observe the following precautions. Failure to do so may cause parts of the body to be caught, resulting in serious injury.

- Remove any heavy loads, such as snow and ice, from the trunk lid before opening it. Failure to do so may cause the trunk lid to suddenly shut again after it is opened.
- When opening or closing the trunk lid, thoroughly check to make sure the surrounding area is safe.
- If anyone is in the vicinity, make sure they are safe and let them know that the trunk is about to open or close.
- Use caution when opening or closing the trunk lid in windy weather as it may move abruptly in strong wind.
- The trunk lid may suddenly shut if it is not opened fully. It is more difficult to open or close the trunk lid on an incline than on a level surface, so beware of the trunk lid unexpectedly opening or closing by itself. Make sure that the trunk lid is fully open and secure before using the trunk.



WARNING

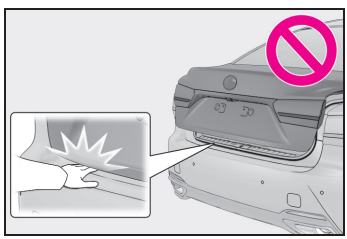
- When closing the trunk lid, take extra care to prevent your fingers etc. from being caught.



- When closing the trunk lid, make sure to press it lightly on its outer surface. If the trunk handle is used to fully close the trunk lid, it may result in hands or arms being caught.
- Do not attach any accessories other than genuine Lexus parts to the trunk lid. Such additional weight on the trunk lid may cause the lid to suddenly shut again after it is opened.

■ Trunk easy closer

In the event that the trunk lid is left slightly open, the trunk easy closer will automatically close it to the fully closed position. It takes several seconds before the trunk easy closer begins to operate. Be careful not to catch fingers or anything else in the trunk lid, as this may cause bone fractures or other serious injuries.



■ Power trunk opener and closer (if equipped)

Observe the following precautions when operating the power trunk opener and closer.
Failure to do so may cause serious injury.

- Check the safety of the surrounding area to make sure there are no obstacles or anything that could cause any of your belongings to get caught.
- If anyone is in the vicinity, make sure they are safe and let them know that the trunk is about to open or close.
- If the trunk closer switch is pressed while the trunk lid is opening during automatic operation, the trunk lid stops opening. Take extra care when on an incline, as the trunk lid may open or close suddenly.
- On an incline, the trunk lid may suddenly shut after it opens automatically. Make sure the trunk lid is fully open and secure before using the trunk.
- In the following situations, the power trunk opener and closer may detect an abnormality and automatic operation may be stopped. In this case, the trunk lid has to be operated manually. Take extra care in this situation, as the stopped trunk lid may suddenly shut, causing an accident.
  - When the trunk lid contacts an obstacle
  - When the battery voltage suddenly drops, such as when the engine switch is turned to IGNITION ON mode or the engine is started during automatic operation
- Do not attach any accessories other than genuine Lexus parts to the trunk lid. The power trunk opener and closer may not operate, causing itself to malfunction, or the trunk lid may suddenly shut again after it is opened.

■ Hands Free Power Trunk Lid (if equipped)

Observe the following precautions.
Failure to do so may cause serious injury.

WARNING

- Exhaust gasses cause the exhaust pipes to become quite hot. When operating the Hands Free Power Trunk Lid, be careful not to touch the exhaust pipe.
- Do not operate the Hands Free Power Trunk Lid if there is little space under the rear bumper.

■ Jam protection function

Observe the following precautions. Failure to do so may cause serious injury.

- Never use any part of your body to intentionally activate the jam protection function.
- The jam protection function may not work if something gets caught just before the trunk lid fully closes. Be careful not to catch fingers or anything else in the trunk lid.
- The jam protection function may not work depending on the shape of the object that is caught. Be careful not to catch fingers or anything else.

NOTICE

■ To prevent trunk easy closer malfunctions

Do not apply force to the trunk lid while the trunk easy closer is operating.

■ To prevent damage to the power trunk opener and closer (vehicles with power trunk opener and closer)

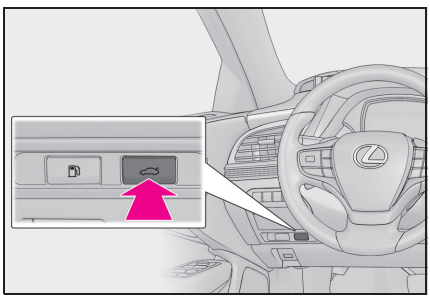
- Make sure that there is no luggage or snow on the trunk lid before operating the power trunk opener and closer. In addition, make sure that there is no ice between the trunk lid and frame that prevents movement of the trunk lid. Operating the power trunk opener and closer when excessive load is present on the trunk lid may cause a malfunction.
- Do not apply excessive force to the trunk lid while the power trunk opener and closer is operating.

Opening/closing the trunk

■ Trunk opener switch

Press the trunk opener switch.

If the vehicle is equipped with a power trunk opener and closer, the trunk lid will fully open.



■ Smart access system with push-button start

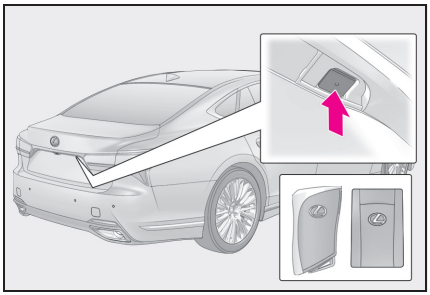
While carrying the electronic key, press the button.

If the vehicle is equipped with a power trunk opener and closer, the trunk lid will fully open.

If the button is pressed while the trunk lid is opening, the trunk lid will stop moving.

When all the doors are unlocked using one of the following methods, the trunk can be opened without the electronic key:

- Entry function
- Wireless remote control
- Door lock switches
- Automatic door unlocking system
- Mechanical key



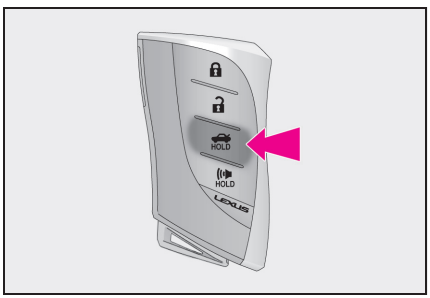
Wireless remote control

Press and hold the switch.

A buzzer sounds.

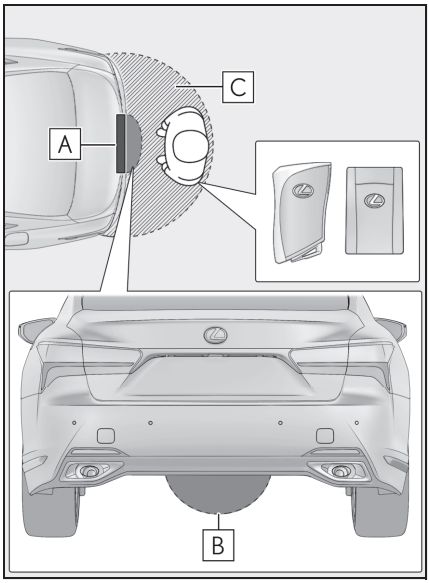
If the vehicle is equipped with a power trunk opener and closer, the trunk lid will fully open.

If the button is pressed while the trunk lid is opening, the trunk lid will stop moving.



Hands Free Power Trunk Lid (if equipped)

1 While carrying an electronic key, stand within the smart access system with push-button start operation area, approximately 11.8 to 19.7 in. (30 to 50 cm) from the rear bumper.



A Kick sensor

B Hands Free Power Trunk Lid operation detection area

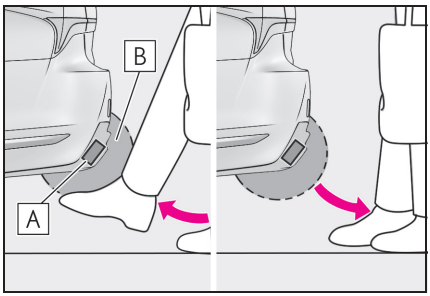
C Smart access system with push-button start operation detection area (→P.109)

2 Perform a kick operation by moving your foot to within approximately 3.9 in. (10 cm) of the rear bumper and then pulling your foot back after the buzzer sounds.

- Perform the entire kick operation within 1 second.
- The trunk lid will not start operating while a foot is detected under the rear bumper.
- Operate the Hands Free Power Trunk Lid without contacting the rear bumper with your foot.
- If another electronic key is in the

cabin or trunk, it may take slightly longer than normal for the operation to begin.

- If the buzzer sounds twice, perform a kick operation again.



A Kick sensor

B Hands Free Power Trunk Lid operation detection area

3 When the kick sensor detects that your foot is pulled back, a buzzer will sound and the trunk will automatically fully open/close.

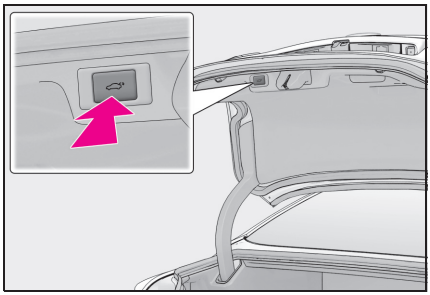
If a foot is moved under the rear bumper while the trunk lid is opening, the trunk lid will stop moving.
If a foot is moved under the rear bumper while the trunk lid is closing, the trunk lid will open.

Trunk closer switch (vehicles with power trunk opener and closer)

Press the trunk closer switch.

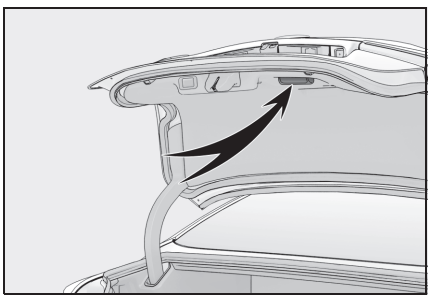
A buzzer will sound and the trunk lid will fully close.

Pressing the switch while the trunk lid is closing opens the trunk lid again.



Trunk grip

Using the trunk grip, pull down the trunk lid without applying sideways force and push the trunk lid down from the outside to close it.



Trunk lid light/trunk light

- The trunk lid light/trunk light turns on when the trunk is opened.
- If the trunk lid light/trunk light is left on when the engine switch is turned off, the light will go off automatically after 20 minutes.

Trunk easy closer

In the event that the trunk lid is left slightly open, the trunk easy closer will automatically close it to the fully closed position.

- The trunk easy closer will operate regardless of the engine switch mode.
- If the trunk easy closer does not operate, open the trunk to the half open position or more and then close it.

Function to prevent the trunk being locked with the electronic key inside

- When all doors are locked, closing the

trunk lid with the electronic key left inside the trunk will sound an alarm.
In this case, the trunk lid can be opened pressing the trunk release button on the trunk lid.

- If the spare electronic key is put in the trunk with all the doors locked, the key confinement prevention function is activated so the trunk can be opened. In order to prevent theft, take all electronic keys with you when leaving the vehicle.
- If the electronic key is put in the trunk with all the doors locked, the key may not be detected depending on the location of the key and the surrounding radio wave conditions. In this case, the key confinement prevention function cannot be activated, causing the doors to lock when the trunk is closed. Make sure to check where the key is before closing the trunk.
- The key confinement prevention function cannot be activated if any one of the doors is unlocked. In this case, open the trunk using the trunk opener.

Overload protection function (vehicles with power trunk opener and closer)

The trunk lid will not operate when excessive load is present on the top of the trunk lid.

Fall-down protection function (vehicles with power trunk opener and closer)

While the trunk lid is opening automatically, applying excessive force to it will stop the opening operation to prevent the trunk lid from rapidly falling down.

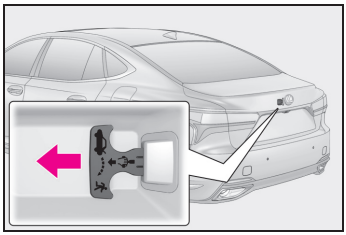
Jam protection function (vehicles with power trunk opener and closer)

While the trunk lid is closing automatically, the trunk lid will stop closing and open if something gets caught.

Internal trunk release lever

The trunk lid can be opened by pulling the glow-in-the-dark lever located on the inside of the trunk lid to the side.

The lever will continue to glow for some time after the trunk lid is closed.



Using the mechanical key

The trunk can be also opened using the mechanical key. (→P.476)

If the trunk is unlocked using the mechanical key, the power trunk lid and trunk easy closer will not be operational. To return them to an operational state, fully close the trunk lid by hand.

If the smart access system with push-button start or the wireless remote control does not operate properly

Use the mechanical key to unlock the trunk. (→P.476)
Replace the key battery with a new one if it is depleted.

Hands Free Power Trunk Lid operating conditions (if equipped)

- When the Hands Free Power Trunk Lid (kick sensor) operation setting is turned on and the engine switch is turned off
- When an electronic key is carried within the operation range

Situations in which the Hands Free Power Trunk Lid may not operate properly (if equipped)

In the following situations, the Hands Free Power Trunk Lid may not operate properly:

- When a foot remains under the rear bumper
- If the rear bumper is strongly hit with a foot or is touched for a while
  If the rear bumper has been touched for a while, wait for a short time before attempting to operate the Hands Free Power Trunk Lid again.
- When standing excessively close to the rear bumper
- When an external radio wave source interferes with the communication

between the electronic key and the vehicle (→P.110)

- When the vehicle is parked near an electrical noise source which affects the sensitivity of the Hands Free Power Trunk Lid, such as a pay parking spot, gas station, electrically heated road, or fluorescent light
- When the vehicle is near a TV tower, electric power plant, radio station, large display, airport or other facility that generates strong radio waves or electrical noise
- When a large amount of water is applied to the rear bumper, such as when the vehicle is being washed or in heavy rain
- When mud, snow, ice, etc. is attached to the rear bumper
- When the vehicle has been parked for a while near objects that may move and contact the rear bumper, such as plants
- When an accessory is installed to the rear bumper

If an accessory has been installed, turn the Hands Free Power Trunk Lid (kick sensor) operation setting off.

■ **Preventing unintentional operation of the Hands Free Power Trunk Lid (if equipped)**

When an electronic key is in the operation detection area, the Hands Free Power Trunk Lid may operate unintentionally, so be careful in the following situations:

- When a large amount of water is applied to the rear bumper, such as when the vehicle is being washed or in heavy rain
- When dirt is wiped off the rear bumper
- When a small animal or small object, such as a ball, moves under the rear bumper
- When an object is moved from under the rear bumper
- If someone is swinging their legs while sitting on the rear bumper
- If the legs or another part of someone's body contacts the rear bumper while passing by the vehicle
- When the vehicle is parked near an electrical noise source which affects the sensitivity of the Hands Free Power Trunk Lid, such as a pay parking spot, gas station, electrically heated road, or fluorescent light
- When the vehicle is near a TV tower, electric power plant, radio station, large display, airport or other facility that generates strong radio waves or electrical noise
- When the vehicle is parked in a place where objects such as plants are near the rear bumper
- If luggage, etc. is set near the rear bumper
- If accessories or a vehicle cover is installed/removed near the rear bumper
- When the vehicle is being towed

To prevent unintentional operation, turn the Hands Free Power Trunk Lid (kick sensor) operation setting off.

■ **Open door warning buzzer**

→P.99

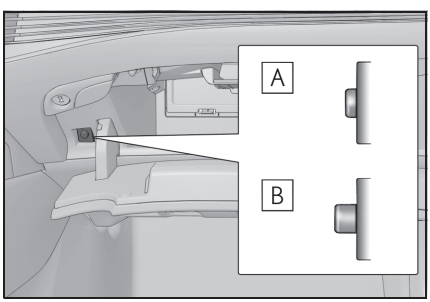
■ **Customization**

Some functions can be customized. (→P.510)

Luggage security system

The trunk opener switch can be temporarily disabled to protect luggage stored in the trunk against theft.

Turn the main switch in the glove box off to disable the trunk opener.



A On

B Off

The trunk lid cannot be opened even with the wireless remote control, entry function or Hands Free Power Trunk Lid.

■ When leaving a key to the vehicle with a parking attendant

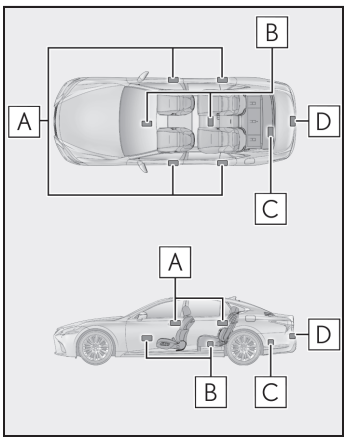
→P.93

Smart access system with push-button start

The following operations can be performed simply by carrying the electronic key (including the card key) on your person, for example in your pocket. The driver should always carry the electronic key.

- Locks and unlocks the doors (→P.96)
- Opens the trunk (→P.103)
- Starts the engine (→P.169)

■ Antenna location



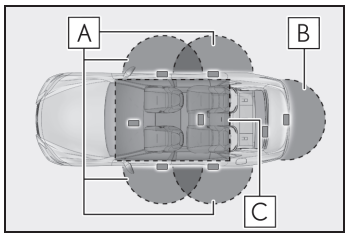
A Antennas outside the cabin

B Antennas inside the cabin

C Antenna inside the trunk

D Antenna outside the trunk

■ **Effective range (areas within which the electronic key is detected)**



A When locking or unlocking the doors

The system can be operated when the electronic key is within about 2.3 ft. (0.7 m) of an outside door handle. (Only the doors detecting the key can be operated.)

B When opening the trunk

The system can be operated when the electronic key is within about 2.3 ft. (0.7 m) of the trunk release button.

C When starting the engine or changing engine switch modes

The system can be operated when the electronic key is inside the vehicle.

■ **Alarms and warning messages**

An alarm sounds and warning messages are displayed on the multi-information display to protect against unexpected accidents or theft of the vehicle resulting from erroneous operation. When a warning message is displayed, take appropriate measures based on the displayed message. (→P.467)

When only an alarm sounds, circumstances and correction procedures are as follows.

- When an exterior alarm sounds once for 5 seconds

Situation	Correction procedure
An attempt was made to lock the vehicle while a door was open.	Close all of the doors and lock the doors again.
The trunk was closed while the electronic key was still inside the trunk and all the doors were locked.	Retrieve the electronic key from the trunk and close the trunk lid.

- When an interior alarm sounds continuously

Situation	Correction procedure
The engine switch was turned to ACCESSORY mode while the driver's door was open (The driver's door was opened when the engine switch was in ACCESSORY mode).	Turn the engine switch off and close the driver's door.
The engine switch was turned off while the driver's door was open.	Close the driver's door.

■ **If "Key Detected in Vehicle" is shown on the multi-information display**

An attempt was made to lock the doors using the smart access system with push-button start while the electronic key was still inside the vehicle. Retrieve the electronic key from the vehicle and lock the doors again.

■ **Battery-saving function**

The battery-saving function will be activated in order to prevent the electronic key battery and the battery from being discharged while the vehicle is not in operation for a long time.

- In the following situations, the smart access system with push-button start may

take some time to unlock the doors. Also the illuminated entry system may not operate properly.
- The electronic key has been left in an area of approximately 11 ft. (3.5 m) of the outside of the vehicle for 40 seconds or longer.
- The smart access system with push-button start has not been used for 5 days or longer.

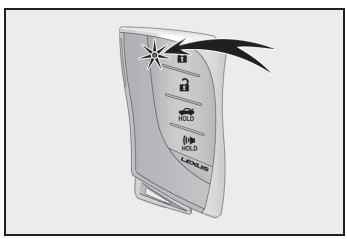
● If the smart access system with push-button start has not been used for 14 days or longer, the doors cannot be unlocked at any doors except the driver's door. In this case, take hold of the driver's door handle, or use the wireless remote control or the mechanical key, to unlock the doors.

■ Turning an electronic key to battery-saving mode

When battery-saving mode is set, battery depletion is minimized by stopping the electronic key from receiving radio waves.

Press twice while pressing and holding . Confirm that the electronic key indicator flashes 4 times.

While the battery-saving mode is set, the smart access system with push-button start cannot be used. To cancel the function, press any of the electronic key buttons.



■ When electronic key function stops

If the position of the electronic key has not changed for a certain amount of time such as when the electronic key is left somewhere, the function of the electronic key stops to reduce depletion of the battery.

■ Conditions affecting operation

The smart access system with push-button start uses weak radio waves. In the following situations, the communication between the electronic key and the vehicle may be affected, preventing the smart access system with push-button start, wireless remote control and engine immobilizer system from operating properly. (Ways of coping: →P.475)

● When the electronic key battery is depleted

● Near a TV tower, electric power plant, gas station, radio station, large display, airport or other facility that generates strong radio waves or electrical noise

● When the electronic key is in contact with, or is covered by the following metallic objects
- Cards to which aluminum foil is attached
- Cigarette boxes that have aluminum foil inside
- Metallic wallets or bags
- Coins
- Hand warmers made of metal
- Media such as CDs and DVDs

● When other wireless keys (that emit radio waves) are being used nearby

● When carrying the electronic key together with the following devices that emit radio waves
- Portable radio, cellular phone, cordless phone or other wireless communication devices
- Another vehicle's electronic key, another electronic key of your vehicle, or a wireless key that emits radio waves
- Personal computers or personal digital assistants (PDAs)
- Digital audio players
- Portable game systems

● If window tint with a metallic content or metallic objects are attached to the rear window

● When the electronic key is placed near a battery charger or electronic devices

● When the vehicle is parked in a pay parking spot where radio waves are emitted.

If the doors cannot be locked/unlocked using the smart access system with push-button start, lock/unlock the doors by performing any of the following:

● Bring the electronic key close to either front door handle and operate the entry function.

● Operate the wireless remote control.

If the doors cannot be locked/unlocked using the above methods, use the mechanical key. (→P.475)

If the engine cannot be started using the smart access system with push-button start, refer to →P.477

■ **Note for the entry function**

● Even when the electronic key is within the effective range (detection areas), the system may not operate properly in the following cases:
- The electronic key is too close to the window or outside door handle, near the ground, or in a high place when the doors are locked or unlocked.
- The electronic key is near the ground or in a high place, or too close to the center of the rear bumper when the trunk is opened.
- The electronic key is on the instrument panel, rear package tray or floor, or in the door pockets or glove box when the engine is started or engine switch modes are changed.

● Do not leave the electronic key on top of the instrument panel or near the door pockets when exiting the vehicle. Depending on the radio wave reception conditions, it may be detected by the antenna outside the cabin and the doors will become lockable from the outside, possibly trapping the electronic key inside the vehicle.

● As long as the electronic key is within the effective range, the doors may be locked or unlocked by anyone. However, only the doors detecting the electronic key can be used to unlock the vehicle.

● Even if the electronic key is not inside the vehicle, it may be possible to start the engine if the electronic key is near the window.

● The doors may unlock or lock if a large amount of water splashes on the door handle, such as in the rain or in a car wash, when the electronic key is within the effective range. (The doors will automatically be locked after approximately 60 seconds if the doors are not opened and closed.)

● If the wireless remote control is used to lock the doors when the electronic key is near the vehicle, there is a possibility that the door may not be unlocked by the entry function. (Use the wireless remote control to unlock the doors.)

● Touching the door lock sensor while wearing gloves may delay or prevent lock operation.

● When the lock operation is performed using the lock sensor, recognition signals will be shown up to two consecutive times. After this, no recognition signals will be given.

● If the door handle becomes wet while the electronic key is within the effective range, the door may lock and unlock repeatedly. In this case, follow the following correction procedures to wash the vehicle:
- Place the electronic key in a location 6 ft. (2 m) or more away from the vehicle. (Take care to ensure that the key is not stolen.)
- Set the electronic key to battery-saving mode to disable the smart access system with push-button start. (→P.110)

● If the electronic key is inside the vehicle and a door handle becomes wet during a car wash, a message may be shown on the multi-information display and a buzzer will sound outside the vehicle. To turn off the alarm, lock all the doors.

● The lock sensor may not work properly if it comes into contact with ice, snow, mud, etc. Clean the lock sensor and attempt to operate it again.

● A sudden approach to the effective range or door handle may prevent the doors from being unlocked. In this case, return the door handle to the original position and check that the doors unlock before pulling the door handle again.

● If there is another electronic key in the detection area, it may take slightly longer to unlock the doors after the door handle is gripped.

■ **When the vehicle is not driven for extended periods**

● To prevent theft of the vehicle, do not

leave the electronic key within 6 ft. (2 m) of the vehicle.

- The smart access system with push-button start can be deactivated in advance.
- Setting the electronic key to battery-saving mode helps to reduce key battery depletion. (→P.110)

■ To operate the system properly

- Make sure to carry the electronic key when operating the system. Do not get the electronic key too close to the vehicle when operating the system from the outside of the vehicle.

Depending on the position and holding condition of the electronic key, the key may not be detected correctly and the system may not operate properly. (The alarm may go off accidentally, or the door lock prevention function may not operate.)

- Do not leave the electronic key inside the trunk.
  The key confinement prevention function may not operate, depending on the location of the key (the inside edge of the trunk), conditions (inside a metal bag, close to metallic objects) and the radio waves in the surrounding area. (→P.105)

■ If the smart access system with push-button start does not operate properly

- Locking and unlocking the doors and trunk: →P.475
- Starting the engine: →P.477

■ Customization

Some functions can be customized. (→P.510)

■ If the smart access system with push-button start has been deactivated in a customized setting

- Locking and unlocking the doors and opening the trunk:
  Use the wireless remote control or mechanical key. (→P.96, 104, 475)
- Starting the engine and changing engine switch modes: →P.477
- Stopping the engine: →P.170

⚠ WARNING

■ Caution regarding interference with electronic devices

- People with implantable cardiac pacemakers, cardiac resynchronization therapy-pacemakers or implantable cardioverter defibrillators should keep away from the smart access system with push-button start antennas. (→P.108)
  The radio waves may affect the operation of such devices. If necessary, the entry function can be disabled. Ask your Lexus dealer for details, such as the frequency of radio waves and timing of the emitted radio waves. Then, consult your doctor to see if you should disable the entry function.
- Users of any electrical medical device other than implantable cardiac pacemakers, cardiac resynchronization therapy-pacemakers or implantable cardioverter defibrillators should consult the manufacturer of the device for information about its operation under the influence of radio waves.
  Radio waves could have unexpected effects on the operation of such medical devices.

Ask your Lexus dealer for details on disabling the entry function.

Front seats

WARNING

■ When adjusting the seat position

- Take care when adjusting the seat position to ensure that other passengers are not injured by the moving seat.
- Do not put your hands under the seat or near the moving parts to avoid injury.
  Fingers or hands may become jammed in the seat mechanism.
- Make sure to leave enough space around the feet so they do not get stuck.

■ Seat adjustment

To reduce the risk of sliding under the lap belt during a collision, do not recline the seat more than necessary.
If the seat is too reclined, the lap belt may slide past the hips and apply restraint forces directly to the abdomen, or your neck may contact the shoulder belt, increasing the risk of death or serious injury in the event of an accident.
Adjustments should not be made while driving as the seat may unexpectedly move and cause the driver to lose control of the vehicle.

■ Operating the front passenger's seat from the driver's seat or rear seat

Do not operate the front passenger's seat when a passenger is seated in it. In addition, do not let anyone sit down in the front passenger's seat while the seat is being operated or when the head restraint is being folded. The front passenger may catch their legs between the instrument panel and seat, or the head restraint may interfere with their head, resulting in injury.

■ When the front passenger's seat is folded forward

If the outside rear view mirror is difficult to see, due to the position of the front passenger's seat, move the front passenger's seat to an appropriate position. Doing so may lead to mishandling of the vehicle and cause an accident, resulting in death or serious injury.

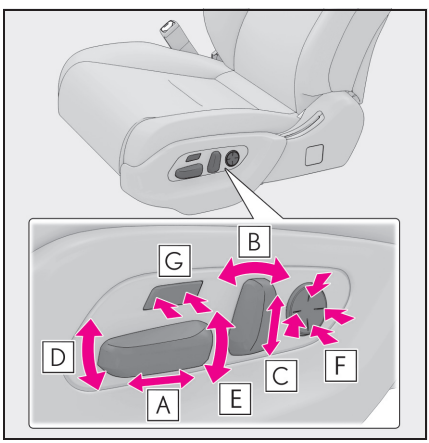
NOTICE

■ Operating the front passenger's seat from the driver's seat or rear seat

Before operating the front passenger's seat, make sure that there is no luggage or any other objects on the seat or in the footwell that could prevent its operation. Such items may result in excess force being applied, causing damage to the seat and/or the luggage.

Adjustment procedure

■ Seat adjustment switches



A Seat position adjustment

B Seatback angle adjustment

C Head restraint height adjustment (if equipped) (→P.130)

D Seat cushion (front) angle adjustment

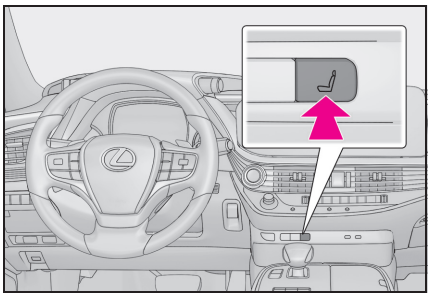
E Vertical height adjustment

F Lumbar support adjustment

G Seat cushion length adjustment (if equipped)

■ Center Display

1 Press the seat switch.



2 Select "Adjustments" on the center display.

3 Select the driver's seat or front passenger's seat.

4 Select the button for the desired adjustment.

- Head restraint (if equipped) (→P.130)
- Shoulder bolster (if equipped)
- Lumbar support
- Pelvic support
- Hip support (if equipped)
- Seatback side bolster and seat cushion side bolster (if equipped)

5 Perform adjustment using the displayed buttons.

The seat will move while a button is selected.

■ When adjusting the front seats

While adjusting a front seat, to avoid contact with the ceiling, instrument panel or rear seats, the operation of the seat may be restricted or parts of the seat other than that being adjusted may move.

■ Operation after the engine switch is turned off

After a certain time elapses after the engine switch is turned off, the following parts of the front seats will move to their neutral positions.

- Shoulder bolster (if equipped)
- Lumbar support
- Pelvic support
- Hip support (if equipped)
- Seatback side and seat cushion side bolster (if equipped)

■ Automatic angle adjustment of the rear displays (if equipped)

When a seat is adjusted, the angle of the rear display will be adjusted automatically to maintain an optimal viewing angle for the rear display from the rear seat.

■ Customization

Some functions can be customized. (→P.510)

Operating the front passenger's seat from the driver's seat

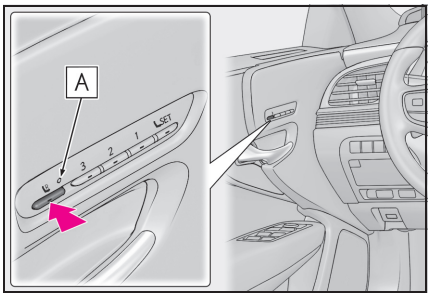
■ Using the driver's seat adjustment switches to adjust the front passenger's seat (front passenger mode)

The mode of the driver's seat adjustment switches can be changed to adjust the front passenger's seat.

1 Press the mode change button on the driver's side door.

The indicator A will illuminate when front

passenger mode is selected.



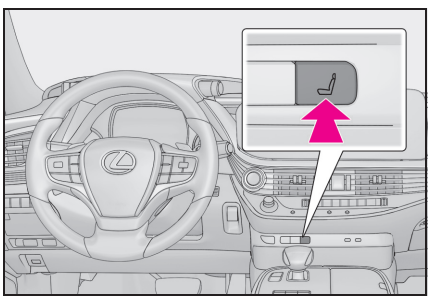
2 Using the seat adjustment switches on the driver's seat, adjust the front passenger's seat.

To cancel front passenger mode, press the mode change button again.

Front passenger mode will be canceled automatically if the driver's seat adjustment switches are not operated for approximately 30 seconds.

■ Using the Center Display (vehicles with a foldable head restraint)

1 Press the seat switch.



2 Select "Arrangement" on the center display.

3 Select the front passenger's seat.

4 Select the button for the desired operation.

"Seat fold": Move the front passenger's seat forward and folds the seatback and head restraint.

"Seat return": Move the front passenger's seat rearward and the seatback and head restraint to the upright position.

If the rear seat behind the front passenger's seat is not in the upright position, it will move to the upright position before the front passenger's seat moves to its upright position.

Vehicles with a rear seat entertainment system: If the front passenger's seat is moved to the upright position and then "Seat return" is selected again, the front passenger's seat will move rearward.

To stop the front passenger's seat while it is moving, select the "Seat fold" or "Seat return" or press the seat switch.

■ Operating the foldable head restraint using the driver's seat adjustment switches in front passenger mode (if equipped)

- When the front passenger's seatback angle is adjusted using the driver's seat adjustment switches in front passenger mode, the front passenger's head restraint will operate automatically as follows:
  - When the front passenger's seatback is moved forward to the upright position, the head restraint will lower and fold forward when the seatback angle adjustment switch is released.
  - When the front passenger's seatback is moved backward to the upright position, the head restraint will move to the upright position when the seatback angle adjustment switch is released.
- If any of the following conditions are met, the front passenger's head restraint will not fold forward even though the front passenger's seatback angle is being adjusted using the driver's seat adjustment switches in front passenger mode:
  - The engine switch is in ACCESSORY mode or off.
  - The weight of an occupant or heavy object, etc. is detected on the front passenger's seat.

Once weight is detected on the seat, the seat will be judged as occupied until the front passenger's door is opened then closed or the engine switch is turned off.

- Vehicles without a rear seat entertainment system:The front passenger's seat is in the rear most position.
- The front passenger's seat belt is fastened.
- The front passenger's door is open. (The front seat will not move forward.)
- The front passenger's seat is not in the lowest position.
- The front passenger's seat seat cushion (front) is not in the lowest position.
- The front passenger's seat seat cushion is extended (if equipped).

● If either of the following conditions is met, the front passenger's head restraint will not return to the upright position even though the front passenger's seatback angle is being adjusted using the driver's seat adjustment switches in front passenger mode:

- The engine switch is in ACCESSORY mode or off.
- The front passenger's seat position is moved to a position forward of the neutral position.

■ **Operating the foldable head restraint using the front passenger's seat adjustment switches (if equipped)**

When the front passenger's head restraint is folded forward and the front passenger's door is open, if the front passenger's seat adjustment switches are used to move the seat backward or recline the seatback, the head restraint will move to the upright position automatically when the switch is released.

To stop the operation of the front passenger's head restraint part-way, perform any of the following operations:

● Operate any front passenger's seat adjustment switch.

The head restraint will stop when the seat position adjustment switch or seatback angle adjustment switch is operated to move the seat backward or recline the seatback, and will resume operating when the switch is released.

● Press the "SET" button.

● Press the "1", "2" or "3" button.

● Press the seat switch.

■ **Operation of the front passenger's seat using the Center Display will be canceled when (vehicles with a foldable head restraint)**

In the following situations, the front passenger's seat cannot be operated using the Center Display:

● The engine switch is in ACCESSORY mode or off.

● The weight of an occupant or heavy object, etc. is detected on the front passenger's seat.

Once weight is detected on the seat, the seat will be judged as occupied until the front passenger's door is opened then closed or the engine switch is turned off.

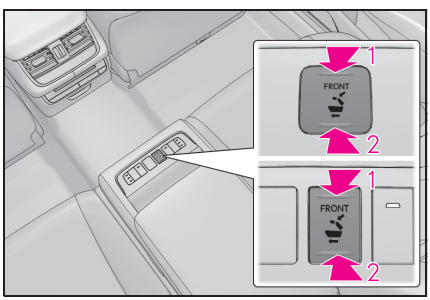
● The front passenger's seat belt is fastened.

● The front passenger's door is open. (The front seat will not move forward.)

■ **When the front passenger's seat is folded forward**

By reclining the front passenger's seat seatback, the forward view of the rear passenger can be improved.

Operating the front passenger's seat from the rear seat (vehicles without power rear seat)



1 Press and hold to move the front passenger's seat forward and fold the seatback forward.

2 Press and hold to move the front

passenger's seat backward and move the seatback to the upright position.

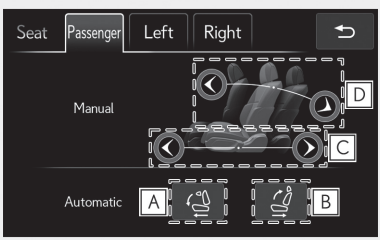
Operating the front passenger's seat from the rear seat (vehicles with power rear seat)

1 Display the home screen on the Rear Multi Operation Panel (→P.340) and then touch "Seat".

2 Touch "Passenger".

3 Touch the button for the desired operation.

When the operating conditions are not met, the buttons will be grayed out.



A Move the front passenger's seat forward and fold the seatback forward.

On vehicles with a foldable head restraint, the head restraint will also fold forward.

To stop the front passenger seat while it is moving, touch "STOP".

B Move the front passenger's seat backward and the seatback to the upright position.

If the rear seat behind the front passenger's seat is not in the upright position, it will move to the upright position before the front passenger's seat moves to its previous position.

On vehicles with a foldable head restraint, the head restraint will also move to the upright position.

Vehicles with a rear seat entertainment system: If the front passenger's seat is moved to the upright position and then **B** is selected again, the front passenger's seat will move rearward.

To stop the front passenger seat while it is moving, touch "STOP".

C Move the front passenger's seat forward or backward

The seat will move while a button is touched and held.

D Adjust the angle of the front passenger's seat seatback*

The seatback will move while a button is touched and held.

*: Vehicles with a foldable head restraint

Operating the front passenger's seat from the rear seat

- In the following situations, the front passenger's seat cannot be operated using the Rear Multi Operation Panel:
  - The engine switch is in ACCESSORY mode or off.*
  - The rear seat belt is not fastened and weight is not detected on the rear seat.

Once weight is detected on the seat, the seat will be judged as occupied until a rear door is opened then closed or the engine switch is turned off and the doors are locked.

- The weight of an occupant or heavy object, etc. is detected on the front passenger's seat.

Once weight is detected on the seat, the seat will be judged as occupied until the front passenger's door is opened then closed or the engine switch is turned off.

- The front passenger's seat belt is fastened.
- The front passenger's door is open. (The front seat will not move forward.)

*: Vehicles with foldable head restraint: Even when the engine switch is in ACCESSORY mode or off, the front passenger seat position and seatback angle can be adjusted.

● If the rear armrest is stowed while the seat position is being adjusted, the operation will stop.

■ **Canceling an operation**

To cancel an operation, press and hold the button of the Rear Multi Operation Panel or press it 3 times in quick succession.

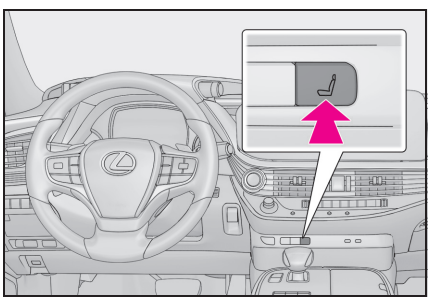
■ **When the front passenger's seat is folded forward**

→P.116

Front seat refresh system (if equipped)

Pneumatic chambers built into the front seat apply pressure to the occupant's body at different modes and intensities.

1 Press the seat switch.



2 Select "Massage" on the center display.

3 Select the driver's seat or front passenger's seat.

4 Select the desired mode.

● "Centripetal"

Applies pressure sequentially from the front of the seat cushion to top of the seatback

● "Centrifugal"

Applies pressure sequentially from the top of the seatback to the front of the seat cushion

● "Upper body"

Applies pressure sequentially from the bottom to the top of the seatback

● "Lower body"

Applies pressure sequentially from the front to the back of the seat cushion

● "Lumbar"

Applies pressure sequentially from the bottom to the top of the lumbar area of the seatback

5 Select the desired intensity and then select (on).

The intensity can be adjusted in 5 steps.

To stop the operation, select (off).

If a seat is not occupied, do not operate the front seat refresh system for that seat.

■ **Refresh system**

● Operating conditions

- The engine switch is in IGNITION ON mode.
- The temperature in the cabin is not extremely high.
- For the front passenger's seat: The weight of an occupant is detected on the front passenger's seat or the front passenger's seat belt is fastened.

Once weight is detected on the seat, the

seat will be judged as occupied until the front passenger's door is opened then closed or the engine switch is turned off.

● Automatic stop function
- The operation will be canceled automatically after approximately 15 minutes.
- If the power easy access system begins operating, the front seat refresh system will stop.

WARNING

■ Important points while driving

Do not adjust the driver's seat refresh system while driving.
Using it may affect your ability to control the vehicle, possibly leading to an accident resulting in death or serious injury.

■ Using the refresh system

● Those who are pregnant, have recently given birth, or suffer from ailments requiring rest (heart disease etc.) should consult a doctor before use.

● Do not allow children to use the refresh function.

● Do not use immediately after consuming a meal or alcohol, or for an extended period of time.

● If you feel sick while using the refresh function, immediately discontinue use.

Power rear seat*

*: If equipped

WARNING

■ When adjusting the seat position

● Take care when adjusting the seat position to ensure that other passengers are not injured by the moving seat.

● When adjusting the rear seat with an ottoman, make sure there is sufficient space so that a foot does not get caught between the ottoman and front passenger seat. (if equipped)

● Vehicles with a rear seat entertainment system: When the rear seat is moving to the Entertainment Mode position, do not allow hands near the rear display. Otherwise, a hand or finger may be caught, possibly causing injury.

■ Seat adjustment

To reduce the risk of sliding under the lap belt during a collision, do not recline the seat more than necessary.
If the seat is too reclined, the lap belt may slide past the hips and apply restraint forces directly to the abdomen, or your neck may contact the shoulder belt, increasing the risk of death or serious injury in the event of an accident.
Adjustments should not be made while driving as the seat may unexpectedly move and cause the driver to lose control of the vehicle.

■ Using the ottoman (if equipped)

● Do not sit on the ottoman.

If someone sits on the ottoman, the seat belt cannot be fitted properly, and they may be thrown from the seat, resulting in death or serious injury in the event of an accident or sudden braking.

WARNING

- When getting in or out of the vehicle, retract the ottoman. If the ottoman is not retracted, it may cause a fall, resulting in injury.
- Do not operate the ottoman when the vehicle is moving.
- Do not allow anyone to put their hands or feet under the rear seat when stowing the ottoman.

NOTICE

■ To prevent an ottoman malfunction (if equipped)

- Do not place any objects in the rear seat footwell that could prevent the operation of the ottoman.
- Do not place heavy luggage on the ottoman.
- Do not place any objects under the ottoman while it is raised for use. These objects may interfere with the ottoman being folded, causing damage to the ottoman or the objects themselves.

■ To prevent a rear display malfunction (if equipped)

Do not attempt to move the rear display by hand, as doing so may damage the rear display.

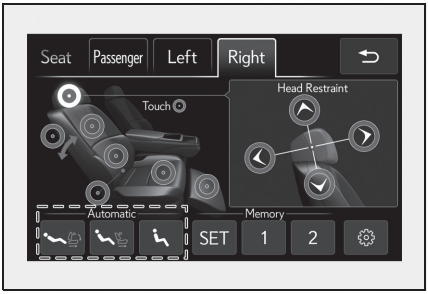
Adjustment procedure

■ Automatic operation

The seat can be moved to preset positions.

1. Display the home screen on the Rear Multi Operation Panel (→P.340) and then touch "Seat".
2. Touch "Left" or "Right".
3. Touch the desired preset button.

When the operating conditions are not met, the preset buttons will be grayed out.



 / : Moves the rear seat to the upright position (Business Mode)

 / : Moves the rear seat with an ottoman to a slightly reclined position (Entertainment Mode) (if equipped)

Vehicles without a rear seat entertainment system: Moves the front passenger's seat forward.

Vehicles with a rear seat entertainment system: Moves the front passenger's seat and rear display to allow the rear display to be comfortably viewed.

: Moves the rear seat with an ottoman to a deeply reclined position (Relaxation Mode) (if equipped)

Moves the front passenger's seat forward and folds the seatback and head restraint forward.

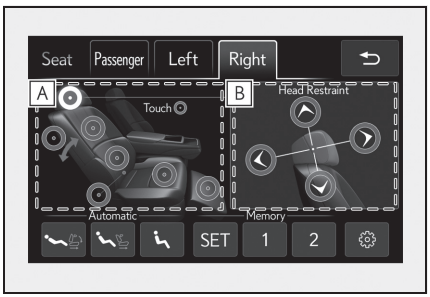
To stop the front passenger seat while it is moving, touch "STOP".

■ Manual operation

1. Display the home screen on the Rear Multi Operation Panel (→P.340) and then touch "Seat".

2 Touch “Left” or “Right”.

3 Touch the button for the desired adjustment.



A Select the part you wish to adjust.

B Adjust the position of the selected part.

The part will move while a button is touched.

■ **Adjustment of the rear seat**

- When a rear seat is close to a front seat, the operation of the rear seat may be restricted.
- If the rear armrest is stowed while the seat position is being adjusted, the operation will stop.

■ **Operating conditions of Business Mode**

When the rear seat belt is not fastened and weight is not detected on the rear seat, Business Mode cannot be selected.

Once weight is detected on the seat, the seat will be judged as occupied until a rear door is opened then closed or the engine switch is turned off and the doors are locked.

■ **The rear seat with an ottoman cannot be moved to Entertainment Mode/Relaxation Mode when (if equipped)**

In the following situations, Entertainment Mode or Relaxation Mode cannot be selected:

- The engine switch is in ACCESSORY mode or off.
- The rear seat belt is not fastened and weight is not detected on the rear seat.

Once weight is detected on the seat, the seat will be judged as occupied until a rear door is opened then closed or the engine switch is turned off and the doors are locked.

- The weight of an occupant or heavy object, etc. is detected on the front passenger’s seat.

Once weight is detected on the seat, the seat will be judged as occupied until the front passenger’s door is opened then closed or the engine switch is turned off.

- The front passenger’s seat belt is fastened.
- The front passenger’s door is open.

■ **When the front passenger’s seat is folded forward**

→P.116

■ **Automatic angle adjustment of the rear displays (if equipped)**

When a seat is adjusted, the angle of the rear display will be adjusted automatically to maintain an optimal viewing angle for the rear display from the rear seat.

■ **Operation after the engine switch is turned off**

After a certain time elapses after the engine switch is turned off, the following parts of the rear seats will move to their neutral positions.

- Shoulder bolster
- Lumbar/pelvic support

■ **Canceling an operation**

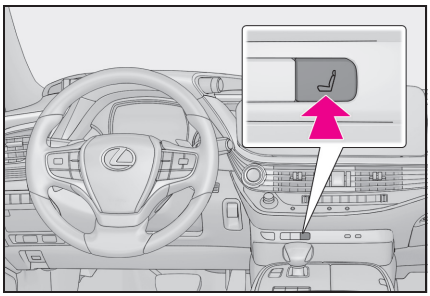
To cancel an operation, press and hold the  button of the Rear Multi Operation Panel or press it 3 times in quick succession.

■ **Customization**

Some functions can be customized. (→P.510)

Returning the rear seat from the front seats

1 Press the seat switch.



2 Select “Arrangement” on the center display.

3 Select the rear seat.

4 Select “Return”.

The rear seat will move to the upright position.

If the “Cancel” is selected while the seat position is being adjusted, the operation will stop.

■ Operation of the rear seats from the front seats

In the following situations, the rear seats cannot be operated from the front seats.

- When the armrest is stowed and weight of an occupant, heavy object, etc. is detected on a rear seat

Once weight is detected on the seat, the seat will be judged as occupied until a rear door is opened then closed or the engine switch is turned off and the doors are locked.

- When the armrest is stowed and a rear seat belt is fastened.

⚠ WARNING

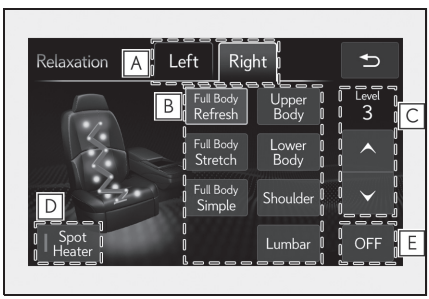
■ When returning the rear seats to the neutral position

To avoid injuring the rear passengers, wait until they have gotten out of the vehicle before operating the switch.

Rear seat relaxation system (if equipped)

The rear seat relaxation system utilizes pneumatic chambers and dedicated heaters, and applies pressure to the occupant’s body at different modes and intensities.

To display the rear seat relaxation system screen, display the home screen on the Rear Multi Operation Panel (→P.340) and then touch “Relaxation”.



A Touch to select the desired rear seat.

B Touch to select the desired mode.

When a button is touched, operation will begin.

C Touch to adjust the intensity.

The intensity can be adjusted in 5 steps.

D Touch to turn the spot heaters on/off.

E Touch to stop the operation.

If a seat is not occupied, do not operate the rear seat relaxation system for that seat.

■ Relaxation system

● Operating conditions
- The engine switch is in IGNITION ON mode.
- The temperature in the cabin is not extremely high.
- The weight of an occupant is detected on the rear seat or the rear seat belt is fastened.

Once weight is detected on the seat, the seat will be judged as occupied until a rear door is opened then closed or the engine switch is turned off and the doors are locked.

● Automatic stop function
- The operation will be canceled automatically after approximately 15 minutes.
- If the door for a seat that the relaxation system is currently being used is opened, the relaxation system will stop operating.

WARNING

■ Using the relaxation system

- Those who are pregnant, have recently given birth, or suffer from ailments requiring rest (heart disease etc.) should consult a doctor before use.
- Do not allow children to use the relaxation function.
- Do not use immediately after consuming a meal or alcohol, or for an extended period of time.
- If you feel sick while using the relaxation function, immediately discontinue use.

Automatic Seat Operation

The following functions will cause the rear seats to move automatically.

■ Seat return function linked to the door opening operation

The rear seat will return to the upright position automatically when the rear door is opened for easier entry and exit of the vehicle.

For the rear seat with an ottoman (if equipped): When the rear door on the side with the rear seat with an ottoman is opened, the seatback of the rear seat with an ottoman will move to a more upright position. The seatback will move to the upright position after the door is closed and the system determines that the rear passenger has exited.

However, if the armrest is stowed, the rear seat will not move.

■ Shift-linked rear seat reclining function

When the shift position is shifted from P, to enhance rear visibility for the driver, the rear seats will recline slightly.

However, the shift-linked rear seat reclining function will not operate in the following situations:

- The weight of an occupant or heavy object, etc. is detected on a rear seat.

Once weight is detected on the seat, the seat will be judged as occupied until a rear door is opened then closed or the engine switch is turned off and the doors are locked.

- A rear seat belt is fastened.
- A rear door is open.
- The armrest is stowed.

When a front seat is close to a rear seat, the rear seats may not operate or the range of movement may be restricted.

■ **Changing automatic seat operation settings**

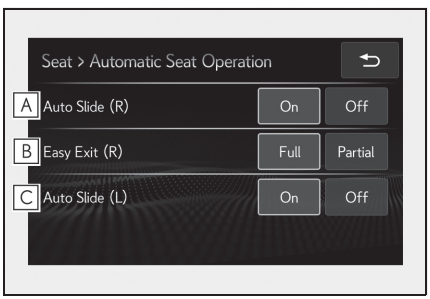
The settings can be changed on the Rear Multi Operation Panel. (→P.340)

1 Display the home screen on the Rear Multi Operation Panel (→P.340) and then touch "Seat".

2 Touch "Left" or "Right".

3 Touch ⚙.

4 Touch a button to change the setting.



A Rear right seat automatic operation

B Rear right seatback movement amount when door-linked rear seat return function operates*

C Rear left seat automatic operation

*: Vehicles with a rear seat with an ottoman

Driving position memory

This feature automatically adjusts the positions of the front seats, steering wheel, outside rear view mirrors and head-up display (if equipped) to make entering and exiting the vehicle easier or to suit your preferences.

Up to 3 different driving positions can be recorded.

Each electronic key (including a card key) can be registered to recall your preferred driving position.

Power easy access system

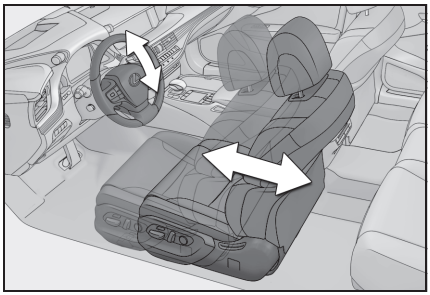
The seat and steering wheel are automatically adjusted to allow the driver to enter and exit the vehicle easily.

▶ Driver's seat

When all of the following have been performed, the seat and steering wheel are automatically adjusted to a position that allows driver to enter and exit the vehicle easily.

- The shift position has been shifted to P.
- The engine switch has been turned off.
- The driver's seat belt has been unfastened.

When the driver's seat adjustment switches are in front passenger mode (→P.114), the seat and steering wheel will not move.



On vehicles with adjustable seat cushion side bolsters, when the driver's door is opened with the engine switch off, the seat cushion side bolsters will lower if they are in the default position.

When any of the following has been performed, the seat and steering wheel automatically return to their original positions.

- The engine switch has been turned to ACCESSORY mode or IGNITION ON mode.
- The driver's seat belt has been fastened.

▶ Front passenger's seat

If all of the following have been performed while the vehicle is stopped, the lumbar support, pelvic support, shoulder bolster (if equipped), seatback side bolster (if equipped), and hip support (if equipped) will be moved to their default position. On vehicles with adjustable seat cushion side bolsters, the seat cushion side bolsters will lower.

- The passenger's seat belt has been unfastened.
- The front passenger's door is opened.

■ **Operation of the power easy access system**

- When exiting the vehicle, the power easy access system may not operate if the seat is already in the rearmost or uppermost position or close to the rear seat.
- If the seat position is adjusted during power easy access system operation, the automatic operation will stop. (The seat will change to manual operation.)
- If the seat position is adjusted during or after the power easy access system operation when the driver is exiting the vehicle, the power easy access system will not operate when entering the vehicle.

■ **Seat cushion side bolster adjustment (if equipped)**

If the seat cushion side bolsters have been lowered, when the front door is closed, the seat cushion side bolsters will move to their default position.

If the seat is adjusted while the seat cushion side bolsters are moving to the default position, their movement will be temporarily suspended. (The seat cushion side bolsters will move to the default position after a certain amount of time.)

■ **Customization**

Some functions can be customized. (→P.510)

Recording a driving position into memory

1 Turn the engine switch to IGNITION ON mode.

2 Check that the shift position is in P.

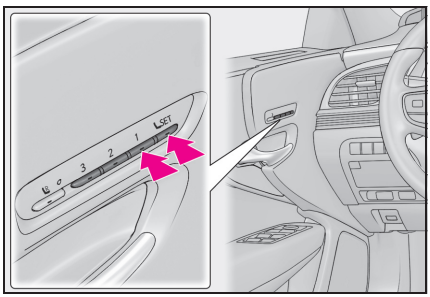
3 Adjust the driver's seat, steering wheel, outside rear view mirrors and head-up display (if equipped) to the desired positions.

4 While pressing the "SET" button, or within 3 seconds after the "SET"

button is pressed, press button “1”, “2” or “3” until the buzzer sounds.

If the selected button has already been preset, the previously recorded position will be overwritten.

When the driver’s seat adjustment switches are in front passenger mode (→P.114), the position of the driver’s seat cannot be registered.



To record the position of the front passenger’s seat, adjust the front passenger’s seat to the desired position and perform step **4** using the buttons on the front passenger’s side.

■ In order to correctly use the driving position memory function

If a seat position is already in the furthest possible position and the seat is operated in the same direction, the recorded position may be slightly different when it is recalled.

WARNING

■ Seat adjustment caution

Take care during seat adjustment so that the seat does not strike the rear passenger or squeeze your body against the steering wheel.

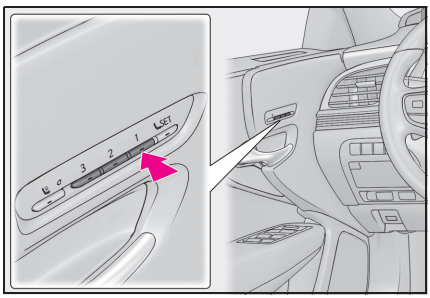
Recalling a driving position

1 Turn the engine switch to IGNITION ON mode.

2 Check that the shift position is in P.

3 Press one of the buttons for the driving position you want to recall until the buzzer sounds.

When the driver’s seat adjustment switches are in front passenger mode (→P.114), a driving position cannot be recalled.



■ To stop the position recall operation part-way through

Perform any of the following operations:

- Press the “SET” button.
- Press button “1”, “2” or “3”.
- Press the mode change button.
- Operate any of the seat adjustment switches (only cancels seat position recall).
- Operate the tilt and telescopic steering control switch (only cancels steering wheel position recall).

■ Recalling a driving position

If a driving position is recalled, the movement of the front seat may be stopped partway if the seat moves close to the rear seat.

If a rear passenger is determined to be in the vehicle, the rearward movement of the front seat may be stopped partway to ensure sufficient space for the rear passenger.

■ Recalling the front passenger’s seat position (vehicles with a rear seat with an ottoman)

If the ottoman of the rear seat is extended, the front passenger’s seat position cannot be recalled.

■ **Operating the driving position memory after turning the engine switch off**

Driver's seat:
Recorded seat positions can be activated up to 180 seconds after the driver's door is opened and another 60 seconds after it is closed again.

Front passenger's seat:
Recorded seat positions can be recalled up to 180 seconds after the front passenger's door is opened.

■ **Using the voice control system**

The following operations can be performed using the voice control system:

- Driving position registration
- Driving position recall (only when the shift position is in P)

For details, refer to the "MULTIMEDIA OWNER'S MANUAL"

■ **When the recorded seat position cannot be recalled**

The seat position may not be recalled in some situations when the seat position is recorded in a certain range. For details, contact your Lexus dealer.

Registering/canceling/recall a driving position to an electronic key (including a card key) (memory recall function)

■ **Registering procedure**

Record your driving position to button "1", "2" or "3" before performing the following:

Carry only the key you want to register, and then close the driver's door.
If 2 or more keys are in the vehicle, the driving position cannot be recorded properly.

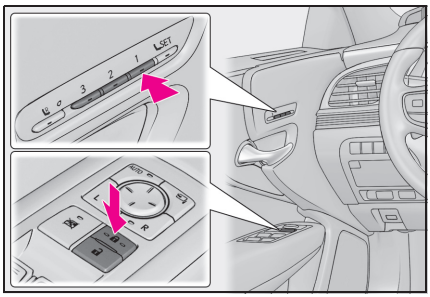
1 Turn the engine switch to IGNITION ON mode.

2 Check that the shift position is in P.

3 Recall the driving position that you want to record.

4 While pressing the recalled button, press and hold the door lock switch (either lock or unlock) until the buzzer sounds.

If the button could not be registered, the buzzer sounds continuously for approximately 3 seconds.



■ **Cancelation procedure**

Carry only the key you want to cancel and then close the driver's door.
If 2 or more keys are in the vehicle, the driving position cannot be canceled properly.

1 Turn the engine switch to IGNITION ON mode.

2 Check that the shift position is in P.

3 While pressing the "SET" button, press and hold the door lock switch (either lock or unlock) until the buzzer sounds twice.

If the button could not be canceled, the buzzer sounds continuously for approximately 3 seconds.

■ **Recall procedure**

1 Make sure that the doors are locked before recalling the driving position. Carry the electronic key that has been registered to the driv-

ing position, and then unlock and open the driver's door using the smart access system with push-button start or wireless remote control.

The driving position will move to the recorded position (not including the steering wheel and head-up display [if equipped]). However, the seat will move to a position slightly behind the recorded position in order to make entering the vehicle easier.

If the driving position is in a position that has already been recorded, the seat and outside rear view mirrors will not move.

2 Turn the engine switch to ACCESSORY mode or IGNITION ON mode, or fasten a seat belt.

The seat, steering wheel and head-up display (if equipped) will move to the recorded position.

■ **Recalling the driving position using the memory recall function**

- Different driving positions can be registered for each electronic key. Therefore, the driving position that is recalled may be different depending on the key being carried.
- If a door other than the driver's door is unlocked with the smart access system with push-button start, the driving position cannot be recalled. In this case, press the driving position button which has been set.

■ **Customization**

Some functions can be customized. (→P.510)

Rear seat position memory*

*: If equipped

The rear seat position can be memorized and recalled with the touch of a button.

Recording a position into memory

1 Turn the engine switch to IGNITION ON mode.

2 Display the home screen on the Rear Multi Operation Panel (→P.340) and then touch "Seat".

3 Touch "Left" or "Right".

4 Adjust the rear seat to the desired position and then touch "SET".

5 Touch "1" or "2".

If the preset is being used, the previously recorded seat position will be overwritten.

■ **In order to correctly use the position memory function**

If a seat position is already in the furthest possible position and the seat is operated in the same direction, the recorded position may be slightly different when it is recalled.

WARNING

■ **Seat adjustment caution**

Take care during seat adjustment so that the rear passengers do not strike the front seats.

Recalling the memorized position

1 Turn the engine switch to IGNITION ON mode.

2 Display the home screen on the Rear Multi Operation Panel (→P.340) and then touch "Seat".

3 Touch "Left" or "Right".

4 Touch "1" or "2".

When the operating conditions are not met, the buttons will be grayed out.

To stop the operation touch "STOP".

If the seat is adjusted while a memorized position is being recalled, the automatic operation will stop. (The seat will change to manual operation.)

■ Operating condition

The weight of an occupant is detected on the rear seat or the rear seat belt is fastened.

Once weight is detected on the seat, the seat will be judged as occupied until the rear door is opened then closed or the engine switch is turned off.

■ Recalling a rear seat position

If a memorized rear seat position is recalled, the seat may stop part-way to ensure sufficient space for the rear passenger.

■ Recalling the ottoman position (if equipped)

When a seat position is recalled, the ottoman will not raise or extend. The ottoman position can only be recalled if the memorized position is lower and shorter than the current position.

Head restraints

Head restraints are provided for all seats.

Vehicles with power rear seat: The head restraint for the rear center seat is integrated into the seatback and cannot be adjusted.

⚠ WARNING

■ Head restraint precautions

Observe the following precautions regarding the head restraints. Failure to do so may result in death or serious injury.

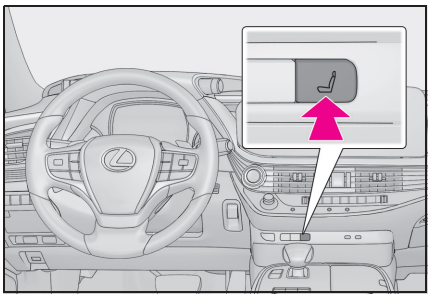
- Use the head restraints designed for each respective seat.
- Adjust the head restraints to the correct position at all times.
- Manual type: After adjusting the head restraints, push down on them and make sure they are locked in position.
- Do not drive with the head restraints removed.

Adjusting a head restraint vertically and horizontally (power head restraints)

■ Front seats

▶ Center Display

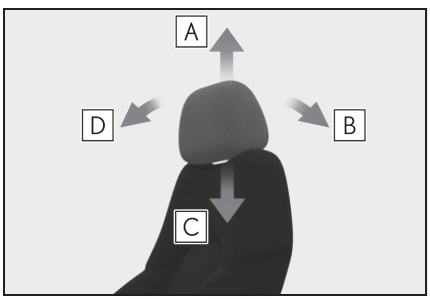
1 Press the seat switch.



2 Select “Adjustments” on the center display.

3 Select the driver’s seat or front passenger’s seat.

4 Select “Headrest” then the desired adjustment button A, B, C or D to adjust the head restraint.



A Up

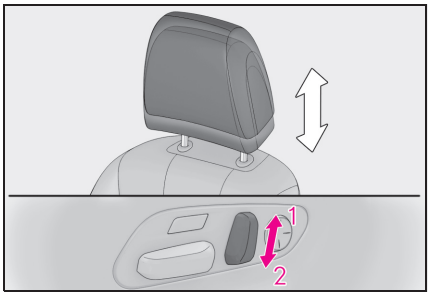
B Backward

C Down

D Forward

The head restraint moves while the adjustment button is selected.

▶ Seat adjustment switches (on some models)



1 Up

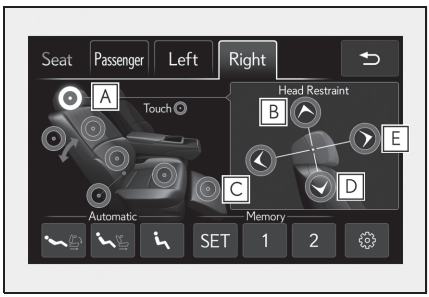
2 Down

■ Rear seats

1 Display the home screen on the Rear Multi Operation Panel (→P.340) and then touch “Seat”.

2 Touch “Left” or “Right”.

3 Touch A then the desired adjustment button B, C, D, or E to adjust the head restraint.



B Up

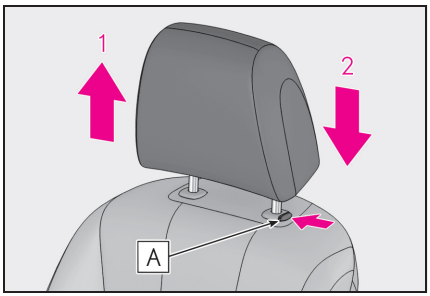
C Backward

D Down

E Forward

The head restraint moves while the adjustment button is touched.

Adjusting a head restraint vertically (manual head restraints)



1 Up

Pull the head restraints up.

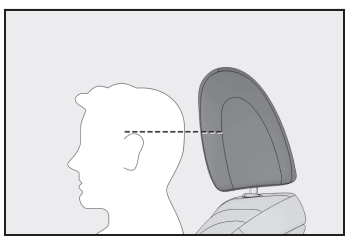
2 Down

Push the head restraint down while pressing the lock release button A.

■ Front seat head restraints (power head restraints)

Depending on the position of the front seat, the front head restraint may not be able to be adjusted upward if it is close to the ceiling.

■ Adjusting the height of the head restraints



Make sure that the head restraints are adjusted so that the center of the head restraint is closest to the top of your ears.

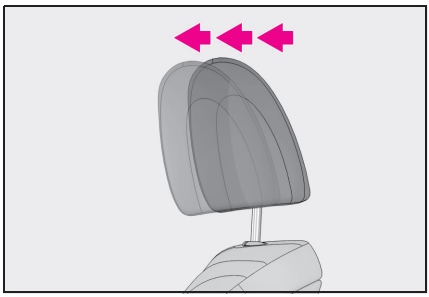
■ Adjusting the rear seat head restraints (manual head restraints)

Always raise the head restraint one level from the stowed position when using.

Adjusting a head restraint horizontally (manual head restraints)

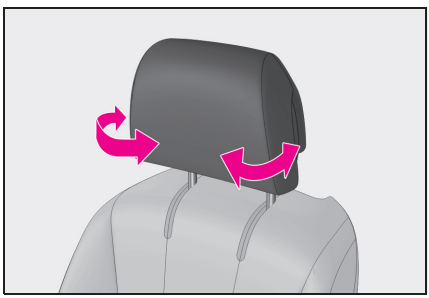
The position of the head restraint can be adjusted forward in 4 stages.

If the head restraint is pulled forward from the foremost position, it will return to the rearmost position.



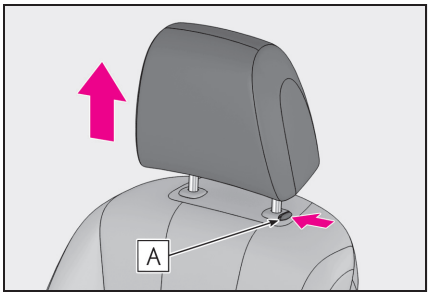
Adjusting the side supports (if equipped)

Push the sides of the head restraint.



Removing the head restraints (manual head restraints)

Pull the head restraint up while pressing the lock release button A.



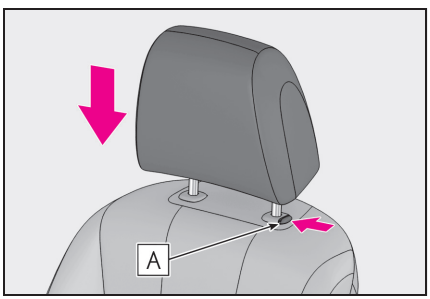
■ **Removing the head restraints (power head restraints)**

For removal and installation of the head restraint, contact your Lexus dealer.

Installing the head restraints (manual head restraints)

Align the head restraint with the installation holes and push it down to the lock position.

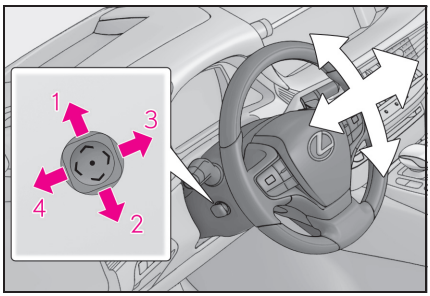
Press and hold the lock release button **A** when lowering the head restraint.



Steering wheel

Adjustment procedure

Operating the switch moves the steering wheel in the following directions:



1 Up
2 Down
3 Toward the driver
4 Away from the driver

■ The steering wheel can be adjusted when

The engine switch is in ACCESSORY or IGNITION ON mode *.

*: If the driver's seat belt is fastened, the steering wheel can be adjusted regardless of engine switch mode.

■ Automatic adjustment of the steering position

A desired steering position can be entered to memory and recalled automatically by the driving position memory system. (→P.124)

■ Power easy access system

The steering wheel and driver's seat move in accordance with engine switch mode and the driver's seat belt condition. (→P.124)

■ Customization

Some functions can be customized. (→P.510)

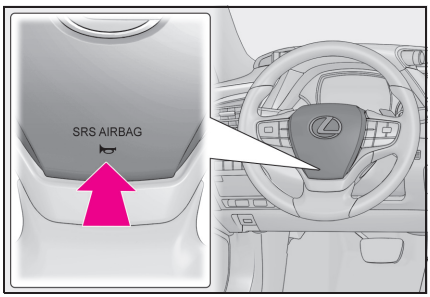
WARNING

■ Caution while driving

Do not adjust the steering wheel while driving.
Doing so may cause the driver to mishandle the vehicle and cause an accident, resulting in death or serious injury.

Sounding the horn

Press on or close to the mark.



Inside rear view mirror*

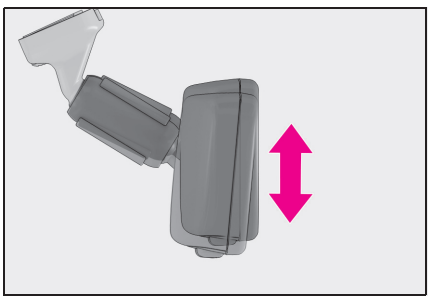
*: If equipped

The rear view mirror's position can be adjusted to enable sufficient confirmation of the rear view.

Adjusting the height of rear view mirror

The height of the rear view mirror can be adjusted to suit your driving posture.

Adjust the height of the rear view mirror by moving it up and down.



WARNING

■ Caution while driving

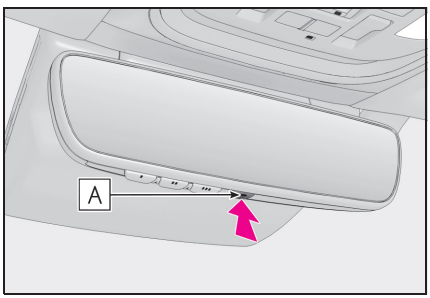
Do not adjust the position of the mirror while driving.
Doing so may lead to mishandling of the vehicle and cause an accident, resulting in death or serious injury.

Anti-glare function

Responding to the level of brightness of the headlights of vehicles behind, the reflected light is automatically reduced.

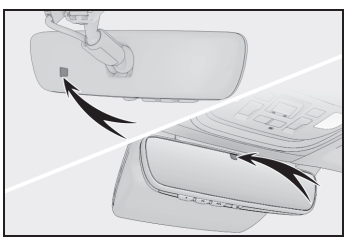
Turn the automatic anti-glare function mode on/off

When the automatic anti-glare function is in ON mode, the indicator A illuminates. The function will set to ON mode each time the engine switch is turned to IGNITION ON mode.
Pressing the button turns the function to OFF mode. (The indicator A also turns off.)



■ To prevent sensor error

To ensure that the sensors operate properly, do not touch or cover them.



Digital Rear-view Mirror*

*: If equipped

The Digital Rear-view Mirror is a system that uses the camera on the rear of the vehicle and displays its image on the display of the Digital Rear-view Mirror.

The Digital Rear-view Mirror can be changed between optical mirror mode and digital mirror mode by operating the lever.

The Digital Rear-view Mirror allows the driver to see the rear view despite obstructions, such as the head restraints or luggage, ensuring rear visibility. Also, the rear seats are not displayed and privacy of the passengers is enhanced.

WARNING

Observe the following precautions. Failure to do so may result in death or serious injury.

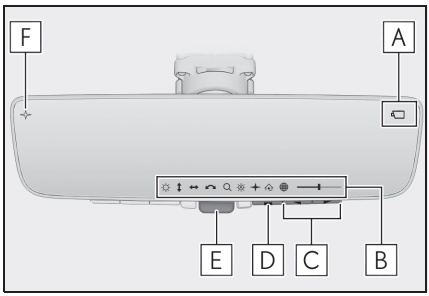
■ Before using the Digital Rearview Mirror

● Make sure to adjust the mirror before driving. (→P.136)

- Change to optical mirror mode and adjust the position of the Digital Rear-view Mirror so that the area behind your vehicle can be viewed properly.
- Change to digital mirror mode and adjust the display settings.

● As the range of the image displayed by the Digital Rear-view Mirror is different from that of the optical mirror, make sure to check this difference before driving.

System components



A Camera indicator

Indicates that the camera is operating normally.

B Icon display area

Displays icons, adjusting gauge, etc. (→P.137)

C Select/adjust button

Press to change the setting of the item you want to adjust.

D Menu button

Press to display the icon display area and select the item you want to adjust.

E Lever

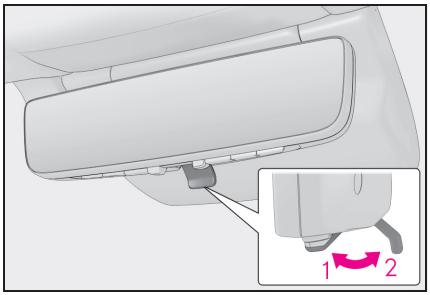
Operate to change between digital mirror mode and optical mirror mode.

F Digital anti-glare mode indicator

In digital mirror mode, this indicates that the anti-glare function is on. (→P.137)

Changing modes

Operate the lever to change between digital mirror mode and optical mirror mode.



1 Digital mirror mode

Displays an image of the area behind the vehicle.

will illuminate in this mode.

2 Optical mirror mode

Turns off the display of the Digital Rearview Mirror allows it to be used as an optical mirror.

■ Digital mirror mode operating condition

The engine switch is turned to IGNITION ON mode.

When the engine switch is changed from IGNITION ON mode to OFF or ACCESSORY mode, the image will disappear after several seconds.

■ When using the Digital Rearview Mirror in digital mirror mode

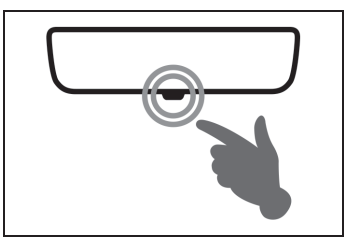
- If it is difficult to see the Digital Rear-view Mirror image because water, snow, mud, etc. is stuck to the camera lens, operate the rear camera washer (→P.188) or change to optical mirror mode.
- When the trunk is open, the Digital Rear-view Mirror image may not display properly. Before driving, make sure the trunk is closed.
- If the display is difficult to see due to reflected light, close the electronic sunshade for the panoramic moon roof.
- Any of the following conditions may occur when driving in the dark, such as at night. None of them indicates that a malfunction has occurred.
  - Colors of objects in the displayed image may differ from their actual color.
  - Depending on the height of the lights of the vehicle behind, the area around the vehicle may appear white and blurry.
  - Automatic image adjustment for brighter surrounding image may cause flickering.

If it is difficult to see the displayed image or flickering bothers you, change to optical mirror mode.

- The Digital Rear-view Mirror may become hot while it is in digital mirror mode. This is not a malfunction.
- Depending on your physical condition or age, it may take longer than usual to focus on the displayed image. In this case, change to optical mirror mode.
- Do not let passengers stare at the displayed image when the vehicle is being driven, as doing so may cause motion sickness.

■ When the system malfunctions

If the symbol shown in the illustration is displayed when using the Digital Rear-view Mirror in digital mirror mode, the system may be malfunctioning. The symbol will disappear in a few seconds. Operate the lever, change to optical mirror mode and have the vehicle inspected by your Lexus dealer.

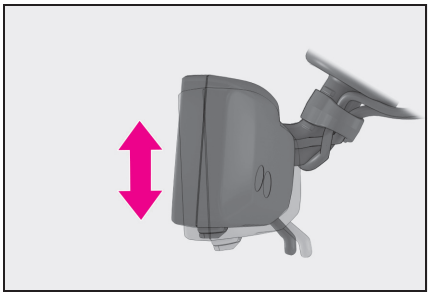


Adjusting the mirror

■ Adjusting the mirror height

The height of the rear view mirror can be adjusted to suit your driving posture.

Change to optical mirror mode, adjusting the height of the rear view mirror by moving it up and down.

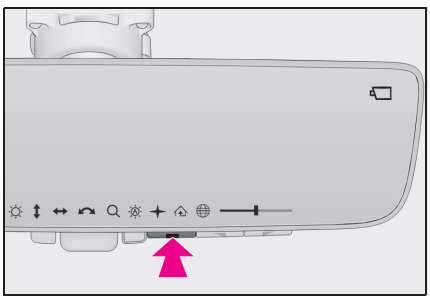


Display settings (digital mirror mode)

Settings of the display in the digital mirror mode, on/off operation of the automatic anti-glare function, etc. can be changed.

1 Press the menu button.

The icons will be displayed.



2 Press the menu button repeatedly and select the item you want to adjust.

3 Press or to change the setting.

The icons will disappear if a button is not operated for approximately 5 seconds or more.

Icons	Settings
	Select to adjust the brightness of the display.
	Select to adjust the area displayed up/down.
	Select to adjust the area displayed to the left/right.
	Select to adjust the angle of the displayed image.
	Select to zoom in/out the displayed image.
	Select to enable/disable the automatic anti-glare function.* Responding to the brightness of the headlights of vehicles behind, the reflected light is automatically adjusted. The automatic anti-glare function is enabled each time the engine switch is changed to IGNITION ON mode.
	Select to display HomeLink® Training Tutorial to assist customers to train their garage door opener system. (→P.385)
	Select to change the language of the Homelink® Training Tutorial.
	The digital anti-glare mode can be turned on and off. When enabled, the brightness of the display is reduced at night to reduce headlight glare from vehicles to the rear.

*: This is a function for the optical mirror mode, however, the setting can also be changed while using the digital mirror mode.

■ Enabling/disabling the automatic anti-glare function (optical mirror mode)

The automatic anti-glare function in the optical mirror mode can be enabled/disabled. The setting can be changed in both the digital mirror mode and the optical mirror mode.

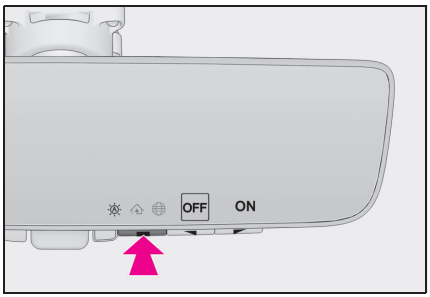
▶ When using the digital mirror mode

→P.137

▶ When using the optical mirror mode

1 Press the menu button.

The icons will be displayed.



2 Press or to enable (“ON”)/disable (“OFF”) the automatic anti-glare function.

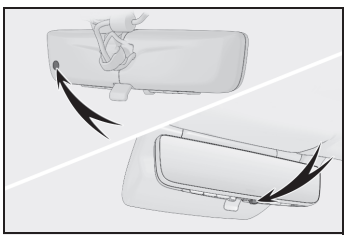
The icons will disappear if a button is not operated for approximately 5 seconds or more.

■ Adjusting the display (digital mirror mode)

- The icons will disappear if a button is not operated for approximately 5 seconds or more.
- If the displayed image is adjusted, it may appear distorted. This is not a malfunction.
- If the brightness of the Digital Rearview Mirror is set too high, it may cause eye strain. Adjust the Digital Rear-view Mirror to an appropriate brightness. If your eyes become tired, change to optical mirror mode.
- The brightness of the Digital Rear-view Mirror will change automatically according to the brightness of the area in front of your vehicle.
- The digital anti-glare mode operates only in locations where the surroundings are dark. Depending on the surrounding illumination environment, the image may not darken and it may not be possible to reduce headlight glare from vehicles to the rear.

■ To prevent the light sensors from malfunctioning

To prevent the light sensors from malfunctioning, do not touch or cover them.



WARNING

Observe the following precautions. Failure to do so may result in death or serious injury.

■ While driving

- Do not adjust the position of the Digital Rear-view Mirror or adjust the display settings while driving.
  Stop the vehicle and operate the Digital Rear-view Mirror control switches. Failure to do so may cause a steering wheel operation error, resulting in an unexpected accident.
- Always pay attention to the vehicle’s surroundings.

WARNING

The size of the vehicles and other objects may look different when in digital mirror mode and optical mirror mode.
When backing up, make sure to directly check the safety of the area around your vehicle, especially behind the vehicle. Additionally, if a vehicle approaches from the rear in the dark, such as at night, the surrounding area may appear dim.

■ **To prevent causes of fire**

If the driver continues using the Digital Rear-view Mirror while smoke or odor comes from the mirror, it may result in fire. Stop using the system immediately and contact your Lexus dealer.

Cleaning the Digital Rearview Mirror

■ Cleaning the mirror surface

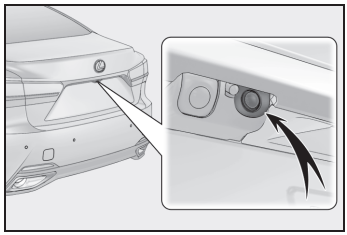
If the mirror surface is dirty, the image on the display may be difficult to see. Clean the mirror surface gently using a soft dry cloth.

■ Cleaning the camera

If it is difficult to see the Digital Rear-view Mirror image because water, snow, mud, etc. is stuck to the camera lens, operate the rear camera washer or change to optical mirror mode. (→P.188)

■ **The camera**

The camera for the Digital Rear-view Mirror is located as shown.



■ **Cleaning the camera with washer fluid**

- When cleaning the camera, it may be difficult to see the image due to the washer fluid. Therefore, take care in the surrounding area while driving.
- If washer fluid remains on the camera lens surface after cleaning, the image may be difficult to see at night due to the height or inclination of the headlights of the vehicle behind. In this case, change to optical mirror mode.
- Some dirts may not be removed completely after cleaning. In this case, rinse the camera lens with a large quantity of water and then wipe it clean with a soft cloth dampened with water.
- Washer fluid is sprayed onto the camera lens surface. Therefore, the ice, snow, etc. adhering around the camera cannot be removed.

NOTICE

■ **To prevent the camera from malfunctioning**

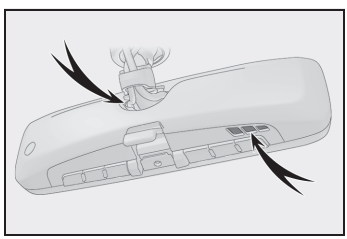
- Observe the following precautions, otherwise the Digital Rear-view Mirror may not operate properly.
  - Do not strike or hit the camera or subject it to a strong impact, as the camera installation position and angle may be changed.
  - Do not remove, disassemble or modify the camera.

NOTICE

- When washing the camera, rinse it with a large quantity of water and then wipe it clean with a soft cloth dampened with water. Do not strongly rub the camera lens, as it may be scratched and will not be able to transmit a clear image.
- Do not allow organic solvent, car wax, window cleaner or glass coat to adhere to the camera cover. If this happens, wipe it off as soon as possible.
- Do not apply hot water to the camera in cold weather, as the sudden change of temperature may cause the camera to not operate properly.
- When using a high pressure washer to wash the vehicle, do not directly spray the camera and its surrounding area, as doing so may cause the camera to not operate properly.

● Do not subject the camera to a strong impact as this could cause a malfunction.
If this happens, have the vehicle inspected by your Lexus dealer as soon as possible.

● Do not block the vent holes of the mirror. Otherwise, the mirror may be hot, leading to a malfunction or a fire.



If you notice any symptoms

If you notice any of the following symptoms, refer to the following table for the likely cause and the solution.

If the symptom is not resolved by the solution, have the vehicle inspected by your Lexus dealer.

Symptom	Likely cause	Solution
The image is difficult to see.	The mirror surface is dirty.	Clean the mirror surface gently, using a soft dry cloth.
	Sunlight or headlights are shining directly into the Digital Rear-view Mirror.	Change to optical mirror mode. (If the light is coming through the panoramic moon roof, close the electronic sunshade.)
	• The vehicle is in a dark area. • The vehicle is near a TV tower, broadcasting station, electric power plant, or other location where strong radio waves or electrical noise may be present. • The temperature around the camera is extremely high/low. • The ambient temperature is extremely low. • It is raining or humid. • Sunlight or headlights are shining directly into the camera lens. • The vehicle is under fluorescent lights, sodium lights, mercury lights, etc. • Exhaust gas is obstructing the camera.	Change to optical mirror mode. (Change back to digital mirror mode when the conditions have improved.)
	Foreign matters such as water droplets or dust is on the camera lens.	• Operate the dedicated camera cleaning washer and clean the camera lens. (→P.188) • Change to optical mirror mode.
The image is out of alignment.	The trunk is not fully closed.	Fully close the trunk.
	The camera or its surrounding area has received a strong impact.	Change to optical mirror mode and have the vehicle inspected by your Lexus dealer.
The display is dim and  is displayed.	The system may be malfunctioning.	Change to optical mirror mode and have the vehicle inspected by your Lexus dealer.
 goes off.		

Symptom	Likely cause	Solution
 is displayed.	The Digital Rear-view Mirror is extremely hot. (The display will gradually become more dim. If the temperature continues to increase, the Digital Rear-view Mirror will turn off.)	Reducing the cabin temperature is recommended to reduce the temperature of the mirror. ( will disappear when the mirror becomes cool.) If  does not disappear even though the mirror is cool, have the vehicle inspected by your Lexus dealer.
The lever cannot be operated properly.	The lever may be malfunctioning.	Change to optical mirror mode and have the vehicle inspected by your Lexus dealer. (To change to optical mirror mode, press and hold the menu button for approximately 10 seconds.)

Outside rear view mirrors

The rear view mirror's position can be adjusted to enable sufficient confirmation of the rear view.

When using the outside rear view mirrors in a cold weather

When it is cold and the outside rear view mirrors are frozen, it may not be possible to fold/extend them or adjust the mirror surface. Remove the ice, snow, etc. covering the outside rear view mirrors.

WARNING

Important points while driving

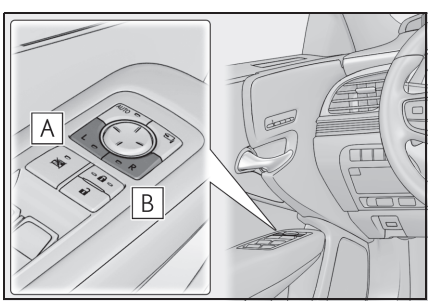
Observe the following precautions while driving.
Failure to do so may result in loss of control of the vehicle and cause an accident, resulting in death or serious injury.

- Do not adjust the mirrors while driving.
- Do not drive with the mirrors folded.
- Both the driver and passenger side mirrors must be extended and properly adjusted before driving.

Adjustment procedure

1 To select a mirror to adjust, press the switch.

The indicator comes on.

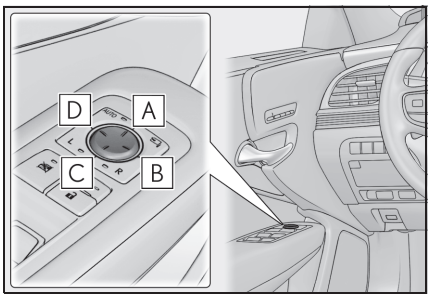


A Left

B Right

Pressing the same switch again will put the switch in neutral.

2 To adjust the mirror, press the switch.



A Up

B Right

C Down

D Left

Mirror angle can be adjusted when

The engine switch is in ACCESSORY or IGNITION ON mode.

Defogging the mirrors

The outside rear view mirrors can be cleared using the mirror defoggers. Turn on the rear window defogger to turn on the outside rear view mirror defoggers. (→P.345)

Auto anti-glare function

When the anti-glare inside rear view mirror is set to automatic mode, the outside rear view mirrors will activate in conjunction with the anti-glare inside rear view mirror to reduce reflected light. (→P.134, 135)

Automatic adjustment of the mirror angle

A desired mirror face angle can be entered to memory and recalled automatically by the driving position memory. (→P.124)

Linked mirror function when reversing

When either "L" or "R" of the mirror select switch is selected, the outside rear view mirrors will automatically angle downwards when the vehicle is reversing in order to give a better view of the ground.

To disable this function, select neither "L" nor "R".

To set the mirror angle used when the vehicle is reversing, adjust the mirror angle at a desired position with the shift position in R.

The adjusted angle will be memorized and the mirror will automatically tilt to the memorized angle whenever the shift position is shifted to R from next time.

The memorized downward tilt position of the mirror is linked to the normal position (angle adjusted with the shift position in other than R). Therefore, if the normal position is changed after adjustment, the tilt position will also change.

When the normal position is changed, readjust the angle in reversing.

WARNING

When the mirror defoggers are operating

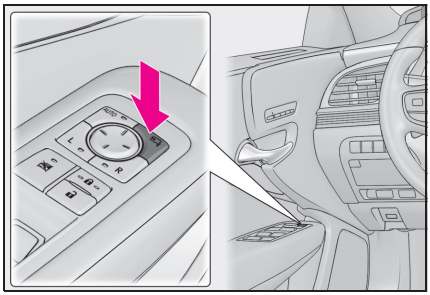
Do not touch the rear view mirror surfaces, as they can become very hot and burn you.

Folding and extending the mirrors

Using the switch

Press the switch to fold the mirrors.

Press it again to extend them to the original position.



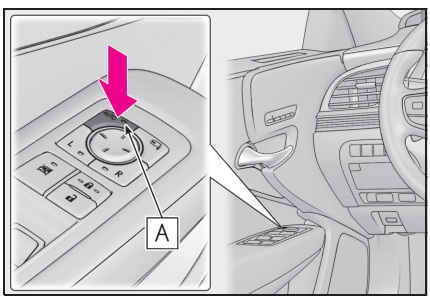
Setting automatic mode

Automatic mode allows the folding or extending of the mirrors to be linked to locking/unlocking of the doors.

Press the "AUTO" switch to set automatic mode.

The indicator A will come on.

Pressing the switch once more will return to manual mode.



When disconnecting and reconnecting battery terminals

The automatic folding/extending mirror function will return to off as default. To turn the function on, press the switch again to select on.

Customization

Some functions can be customized. (→P.510)

WARNING

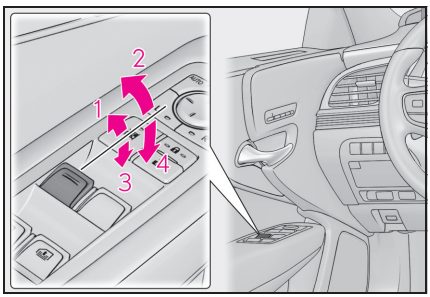
■ When a mirror is moving

To avoid personal injury and mirror malfunction, be careful not to get your hand caught by the moving mirror.

Power windows

Opening and closing the power windows

The power windows can be opened and closed using the switches. Operating the switch moves the windows as follows:



1 Closing

2 One-touch closing*

3 Opening

4 One-touch opening*

*: To stop the window partway, operate the switch in the opposite direction.

■ The power windows can be operated when

The engine switch is in IGNITION ON mode.

■ When the driver's power window switch is used to open a rear power window (vehicles with rear door sunshades)

If a rear door sunshade is extended or being extended when the driver's power window switch is pushed, only the rear door sunshade will be retracted. To open the rear power window from the driver's seat, push the driver's power window switch again.

■ Operating the power windows after turning the engine off

The power windows can be operated for approximately 45 seconds even after the engine switch is turned to ACCESSORY mode or turned off. They cannot, however, be operated once either front door is opened.

■ Jam protection function

If an object becomes jammed between the window and the window frame while the window is closing, window movement is stopped and the window is opened slightly.

■ Catch protection function

If an object becomes caught between the door and window while the window is opening, window movement is stopped.

■ When the side window cannot be opened or closed

When the jam protection function or catch protection function operates unusually and the side window cannot be opened or closed, perform the following operations with the power window switch of that door.

- Stop the vehicle. With the engine switch in IGNITION ON mode, within 4 seconds of the jam protection function or catch protection function activating, continuously operate the power window switch in the one-touch closing direction or one-touch opening direction so that the side window can be opened and closed.
- If the side window cannot be opened and closed even when performing the above operations, perform the following procedure for function initialization.

1 Turn the engine switch to IGNITION ON mode.

2 Pull and hold the power window switch in the one-touch closing direction and completely close the side window.

3 Release the power window switch for a moment, resume pulling the switch in the one-touch closing direction, and hold it there for approximately 6 seconds or more.

4 Press and hold the power window switch in the one-touch opening direction. After the side window is completely opened, continue holding the switch for an additional 1 second or more.

5 Release the power window switch for a moment, resume pushing the switch in the one-touch opening direction, and hold it there for approximately 4 seconds or more.

6 Pull and hold the power window switch in the one-touch closing direction again. After the side window is completely closed, continue holding the switch for a further 1 second or more.

If you release the switch while the window is moving, start again from the beginning.
If the window reverses and cannot be fully closed or opened, have the vehicle inspected by your Lexus dealer.

Door lock linked window operation

- The power windows can be opened and closed using the mechanical key.* (→P.476)
- The power windows can be opened using the wireless remote control.* (→P.96)

*: These settings must be customized at your Lexus dealer.

Power windows open warning buzzer

A buzzer sounds and a message is shown on the multi-information display in the instrument cluster when the engine switch is turned off and the driver's door is opened with the power windows open.

Customization

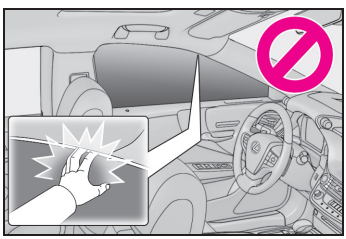
Some functions can be customized. (→P.510)

WARNING

Observe the following precautions. Failure to do so may result in death or serious injury.

Closing the windows

- The driver is responsible for all the power window operations, including the operation for the passengers. In order to prevent accidental operation, especially by a child, do not let a child operate the power windows. It is possible for children and other passengers to have body parts caught in the power window. Also, when riding with a child, it is recommended to use the window lock switch. (→P.148)
- Check to make sure that all passengers do not have any part of their body in a position where it could be caught when a window is being operated.



- When using the wireless remote control or mechanical key and operating the power windows, operate the power window after checking to make sure that there is no possibility of any passenger having any of their body parts caught in the window. Also do not let a child operate window by the wireless remote control or mechanical key. It is possible for children and other passengers to get caught in the power window.
- When exiting the vehicle, turn the engine switch off, carry the key and exit the vehicle along with the child. There may be accidental operation, due to mischief, etc., that may possibly lead to an accident.

Jam protection function

- Never use any part of your body to intentionally activate the jam protection function.

WARNING

- The jam protection function may not work if something gets jammed just before the window is fully closed. Be careful not to get any part of your body jammed in the window.

■ Catch protection function

- Never use any part of your body or clothing to intentionally activate the catch protection function.
- The catch protection function may not work if something gets caught just before the window is fully opened. Be careful not to get any part of your body or clothing caught in the window.

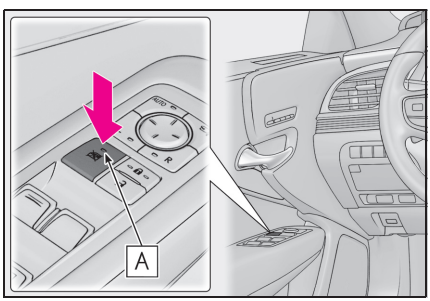
Preventing accidental operation (window lock switch)

This function can be used to prevent children from accidentally opening or closing a passenger window.

Press the switch.

The indicator A will come on and the passenger windows will be locked.

The passenger windows can still be opened and closed using the driver's switch even if the lock switch is on.



■ The power windows can be operated when

The engine switch is in IGNITION ON mode.

■ When the battery is disconnected

The window lock switch is disabled. If necessary, press the window lock switch after reconnecting the battery.

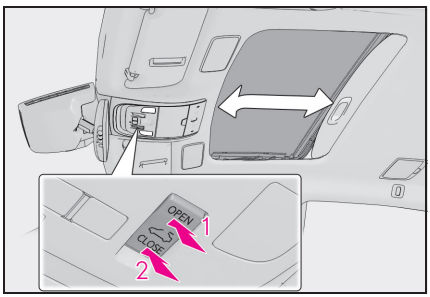
Moon roof*

*: If equipped

Use the overhead switches to open and close the moon roof and tilt it up and down.

Operating the moon roof

■ Opening and closing



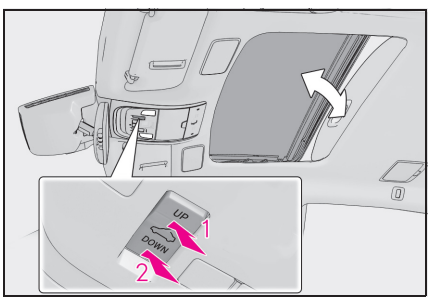
1 Opens the moon roof*

The moon roof tilts up and then fully opens.

2 Closes the moon roof*

*: Lightly press either side of the moon roof switch to stop the moon roof partway.

■ Tilting up and down



1 Tilts the moon roof up*

2 Tilts the moon roof down*

*: Lightly press either side of the moon roof switch to stop the moon roof partway.

■ The moon roof can be operated when

The engine switch is in IGNITION ON mode.

■ Operating the moon roof after turning the engine off

The moon roof can be operated for approximately 45 seconds after the engine switch is turned to ACCESSORY mode or turned off. It cannot, however, be operated once either front door is opened.

■ Jam protection function

If an object is detected between the moon roof and the frame while the moon roof is closing or tilting down, travel is stopped and the moon roof opens slightly.

■ Sunshade

The sunshade can be opened and closed manually. However, the sunshade will open automatically when the moon roof is opened.

■ Door lock linked moon roof operation

- The moon roof can be opened and closed using the mechanical key.* (→P.476)
- The moon roof can be opened using the wireless remote control.* (→P.96)

*: These settings must be customized at your Lexus dealer.

■ When the moon roof does not close normally

Perform the following procedure:

1 Stop the vehicle.

2 Press and hold the "CLOSE" switch.*

The moon roof will close, reopen and pause for approximately 10 seconds. Then it will close again and stop at the completely closed position.

3 Check to make sure that the moon roof is completely closed and then release the switch.

*: If the switch is released at the incorrect time, the procedure will have to be performed again from the beginning.

If the moon roof does not fully close even

after performing the above procedure correctly, have the vehicle inspected by your Lexus dealer.

If the moon roof does not move normally

If the moon roof does not open or close normally or the automatic opening function does not operate, perform the following initialization procedure.

1 Stop the vehicle.

2 Press and hold the "DOWN" switch.*

The moon roof will stop at the tilt-up position. After that, it will open, close, tilt up, tilt down, and stop at the fully closed position.

3 Confirm that the moon roof has completely stopped and release the switch.

*: If you release the switch while the moon roof is moving, perform the procedure again from the beginning.

If, after performing the above procedures correctly, the moon roof still does not open or close normally or the automatic opening function does not operate, have the vehicle inspected by your Lexus dealer.

Moon roof open warning buzzer

A buzzer sounds and a message is shown on the multi-information display in the instrument cluster when the engine switch is turned off and the driver's door is opened with the moon roof open.

Customization

Some functions can be customized.
(→P.510)

WARNING

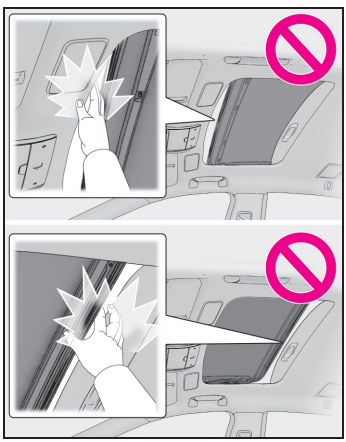
Observe the following precautions. Failure to do so may cause death or serious injury.

Opening the moon roof

- Do not allow any passengers to put their hands or heads outside the vehicle while it is moving.
- Do not sit on top of the moon roof.

Opening and closing the moon roof

- The driver is responsible for moon roof opening and closing operations.
  In order to prevent accidental operation, especially by a child, do not let a child operate the moon roof. It is possible for children and other passengers to have body parts caught in the moon roof.
- Check to make sure that all passengers do not have any part of their body in a position where it could be caught when the moon roof is being operated.



- When using the wireless remote control or mechanical key and operating the moon roof, operate the moon roof after checking to make sure that there is no possibility of any passenger having any of their body parts caught in the moon roof. Also, do not let a child operate moon roof by the wireless remote control or mechanical key. It is possible for children and other passengers to get caught in the moon roof.
- When exiting the vehicle, turn the engine switch off, carry the key and exit the vehicle along with the child. There may be accidental operation, due to mischief, etc., that may possibly lead to an accident.

WARNING

■ Jam protection function

- Never use any part of your body to intentionally activate the jam protection function.
- The jam protection function may not work if something gets caught just before the moon roof is fully closed. Also, the jam protection function is not designed to operate while the moon roof switch is being pressed. Take care so that your fingers, etc. do not get caught.

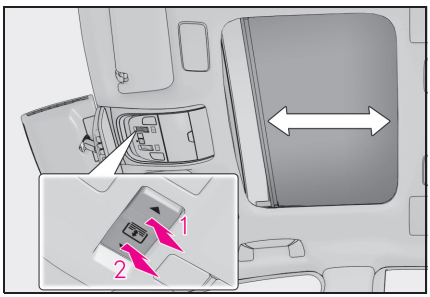
Panoramic moon roof*

*: If equipped

Use the overhead switches to operate the panoramic moon roof and electronic roof sunshade.

Operating the panoramic moon roof

■ Opening and closing the electronic front roof sunshade



1 Opens the electronic front roof sunshade*

2 Closes the electronic front roof sunshade*

If the panoramic moon roof is not fully closed, it will close fully before the electronic front roof sunshade closes.

*: Lightly press either side of the front roof sunshade switch to stop the electronic front roof sunshade partway.

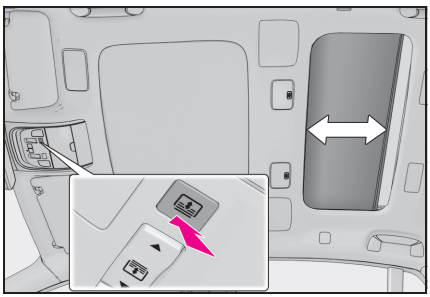
■ Opening and closing the electronic rear roof sunshade

▶ Rear roof sunshade switch

Press the rear roof sunshade switch.

Lightly press the switch while the electronic rear roof sunshade is opening/closing will stop the operation.

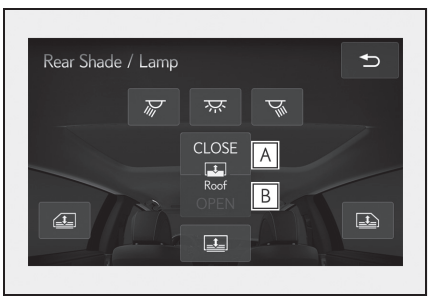
Press the switch again will operate the electronic rear roof sunshade in the opposite direction.



▶ Rear Multi Operation Panel

1 Display the Home screen (→P.340) and then touch "Shade/Lamp" or "Lamp".

2 Touch the button for the desired operation.



A Closes the electronic rear roof sunshade

B Opens the electronic rear roof sunshade

During a electronic rear roof sunshade open/close operation, if the rear roof sunshade open/close button is touched or the button of the Rear Multi Operation Panel is pressed and held or pressed 3 times, the operation will be canceled.

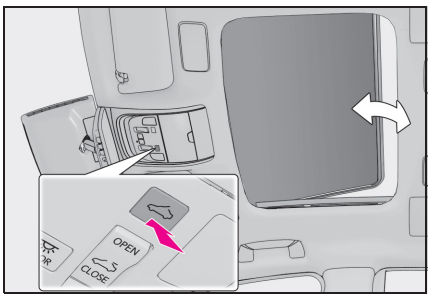
■ Tilting the panoramic moon roof up and down

Press the tilt switch.

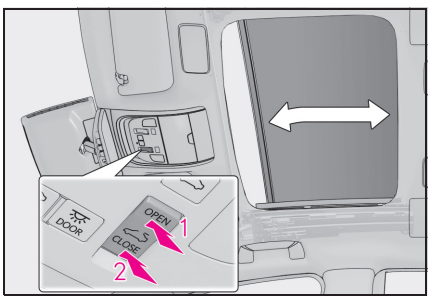
When the panoramic moon roof is tilted up, the electronic front roof sunshade will open.

The panoramic moon roof can be tilted down only when it is in the tilt-up position.

Lightly press the switch while the panoramic moon roof is operating will stop the operation.



■ Opening and closing the panoramic moon roof



1 Opens the panoramic moon roof*

When the panoramic moon roof is opened, the electronic front roof sunshade will open.

The panoramic moon roof can be opened from the tilt-up position.

2 Closes the panoramic moon roof*

*: Lightly press either side of the panoramic moon roof switch to stop the

panoramic moon roof partway.

■ **The panoramic moon roof can be operated when**

The engine switch is in IGNITION ON mode.

■ **Operating the panoramic moon roof after turning the engine off**

The panoramic moon roof and electronic roof sunshade can be operated for approximately 45 seconds after the engine switch is turned to ACCESSORY mode or turned off. It cannot, however, be operated once the driver's door is opened.

■ **Jam protection function**

If an object is detected between the panoramic moon roof and the frame in the following situations, travel is stopped and the panoramic moon roof opens slightly:

- The panoramic moon roof is closing or tilting down.
- The electronic roof sunshade is closing.

■ **Door lock linked panoramic moon roof operation**

- The panoramic moon roof can be opened and closed using the mechanical key.* (→P.476)
- The panoramic moon roof can be opened using the wireless remote control.* (→P.96)

*: These settings must be customized at your Lexus dealer.

■ **When the panoramic moon roof or electronic front roof sunshade does not close normally**

Perform the following procedure:

1. Stop the vehicle.
2. Turn the engine switch to IGNITION ON mode.
3. Press and hold the "CLOSE" switch or the front roof sunshade close switch. Continue pressing the switch for approximately 10 seconds after the panoramic moon roof or electronic front roof sunshade closes and reopens. The panoramic moon roof and electronic front roof sunshade will start to close.*
4. Check that the panoramic moon roof and electronic front roof sunshade are fully closed and release the switch.

*: If the switch is released at the incorrect time, the procedure will have to be performed again from the beginning.

If the panoramic moon roof or electronic front roof sunshade does not fully close even after performing the above procedure correctly, have the vehicle inspected by your Lexus dealer.

■ **When the electronic rear roof sunshade does not close normally**

Perform the following procedure:

1. Stop the vehicle.
2. Turn the engine switch to IGNITION ON mode.
3. Press and hold the rear roof sunshade switch. Continue pressing the switch for approximately 10 seconds after the electronic rear roof sunshade closes and reopens. The electronic rear roof sunshade will start to close.*
4. Check that the electronic rear roof sunshade are fully closed and release the switch.

*: If the switch is released at the incorrect time, the procedure will have to be performed again from the beginning.

If the panoramic moon roof or electronic front roof sunshade does not fully close even after performing the above procedure correctly, have the vehicle inspected by your Lexus dealer.

■ **If the panoramic moon roof or electronic front roof sunshade does not move normally**

If the panoramic moon roof or electronic front roof sunshade does not open or close normally or the automatic opening function does not operate, perform the following initialization procedure.

1. Stop the vehicle.
2. Turn the engine switch to IGNITION ON mode.

3 Fully close the panoramic moon roof and electronic front roof sunshade.

4 Press and hold the "CLOSE" switch.*

The electronic front roof sunshade will open after approximately 10 seconds. Then the panoramic moon roof will open, close, tilt up and tilt down. After that, the electronic front roof sunshade will fully close and stop.

5 Check that the panoramic moon roof and electronic front roof sunshade are fully closed and release the switch.

*: If the switch is released at the incorrect time, the procedure will have to be performed again from the beginning.

If, after performing the above procedures correctly, the panoramic moon roof and electronic front roof sunshade still does not open or close normally or the automatic opening function does not operate, have the vehicle inspected by your Lexus dealer.

If the electronic rear roof sunshade does not move normally

If the electronic rear roof sunshade does not open or close normally or the automatic opening function does not operate, perform the following initialization procedure.

1 Stop the vehicle.

2 Turn the engine switch to IGNITION ON mode.

3 Open the rear roof sunshade.

4 Press and hold the rear roof sunshade switch.*

Continue pressing the switch for approximately 10 seconds after the electronic rear roof sunshade closes. The electronic rear roof sunshade will begin operating again and stop at the fully closed position.

5 Check that the electronic rear roof sunshade are fully closed and release the switch.

*: If the switch is released at the incorrect time, the procedure will have to be performed again from the beginning.

If, after performing the above procedures correctly, the electronic rear roof sunshade still does not open or close normally or the automatic opening function does not operate, have the vehicle inspected by your Lexus dealer.

Panoramic moon roof open warning buzzer

A buzzer sounds and a message is shown on the multi-information display in the instrument cluster when the engine switch is turned off and the driver's door is opened with the panoramic moon roof open.

Customization

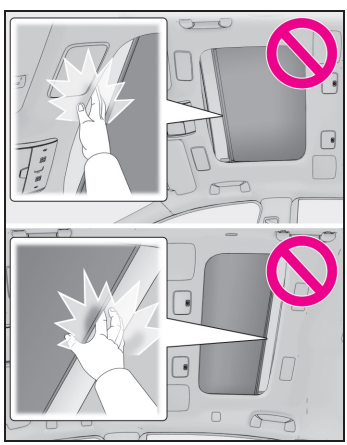
Some functions can be customized. (→P.510)

WARNING

Observe the following precautions. Failing to do so may cause death or serious injury.

Opening and closing the electronic roof sunshade

- Check to make sure that all passengers do not have any part of their body in a position where it could be caught when the electronic sunshade is being operated.
- Do not let a child operate the electronic sunshade. Closing the electronic roof sunshade on someone can cause death or serious injury.



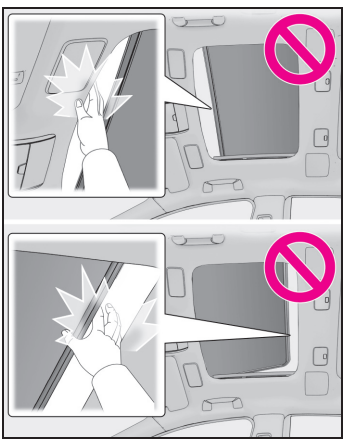
WARNING

■ Opening the panoramic moon roof

- Do not allow any passengers to put their hands or heads outside the vehicle while it is moving.
- Do not sit on top of the panoramic moon roof.

■ Opening and closing the panoramic moon roof

- The driver is responsible for panoramic moon roof opening and closing operations. In order to prevent accidental operation, especially by a child, do not let a child operate the panoramic moon roof. It is possible for children and other passengers to have body parts caught in the panoramic moon roof.
- Check to make sure that all passengers do not have any part of their body in a position where it could be caught when the panoramic moon roof is being operated.



- When using the wireless remote control or mechanical key and operating the panoramic moon roof, operate the panoramic moon roof after checking to make sure that there is no possibility of any passenger having any of their body parts caught in the panoramic moon roof. Also, do not let a child operate panoramic moon roof by the wireless remote control or mechanical key. It is possible for children and other passengers to get caught in the panoramic moon roof.
- When exiting the vehicle, turn the engine switch off, carry the key and exit the vehicle along with the child. There may be accidental operation, due to mischief, etc., that may possibly lead to an accident.

■ Jam protection function

- Never use any part of your body to intentionally activate the jam protection function.
- The jam protection function may not work if something gets caught just before the panoramic moon roof or electronic roof sunshade is fully closed. Also, the jam protection function is not designed to operate while the switch is being pressed. Take care so that your fingers, etc. do not get caught.

■ To prevent burns or injuries

Do not touch the area between the underside of the panoramic moon roof and the electronic sunshade. Your hand may get caught and you could injure yourself. Also, if the vehicle is left in direct sunlight for a long time, the underside of the panoramic moon roof could become very hot and could cause burns.

NOTICE

■ **To prevent damage to the panoramic moon roof**

- Before opening the panoramic moon roof, make sure that there are no foreign objects, such as stones or ice, around the opening.
- Do not hit the surface or edge of the panoramic moon roof with hard objects.

■ **After the vehicle has been washed or rained on**

Before opening the panoramic moon roof, wipe any water off the panoramic moon roof. Otherwise, water may enter the cabin when the panoramic moon roof is opened.

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Driving the vehicle

The following procedures should be observed to ensure safe driving:

Driving procedure

■ **Starting the engine**

→P.169

■ **Driving**

1 With the brake pedal depressed, shift the shift position to D. (→P.173)

Check that the shift position indicator shows D.

2 If the parking brake is set, release the parking brake. (→P.180)

3 Gradually release the brake pedal and gently depress the accelerator pedal to accelerate the vehicle.

■ **Stopping**

1 Depress the brake pedal.

2 If necessary, set the parking brake.

■ **Parking the vehicle**

1 Depress the brake pedal to stop the vehicle completely.

2 If the parking brake is released, set the parking brake. (→P.180)

3 Shift the shift position to P. (→P.174)

Check that the shift position indicator shows P and the parking brake indicator is illuminated.

4 Press the engine switch to stop the engine.

5 Slowly release the brake pedal.

6 Lock the door, making sure that you have the electronic key on your person.

If parking on a hill, block the wheels as needed.

■ **Starting off on a steep uphill**

1 Firmly depress the brake pedal and shift the shift position to D.

The hill-start assist control will be activated.

2 Set the parking brake. (→P.180)

3 Release the brake pedal and gently depress the accelerator pedal to accelerate the vehicle.

4 Release the parking brake. (→P.180)

■ **Driving in the rain**

- Drive carefully when it is raining, because visibility will be reduced, the windows may become fogged-up, and the road will be slippery.
- Drive carefully when it starts to rain, because the road surface will be especially slippery.
- Refrain from high speeds when driving on an expressway in the rain, because there may be a layer of water between the tires and the road surface, preventing the steering and brakes from operating properly.

■ **Engine speed while driving**

In the following conditions, the engine speed may become high while driving. This is due to automatic up-shifting control or down-shifting implementation to meet driving conditions. It does not indicate sudden acceleration.

- The vehicle is judged to be driving uphill or downhill
- When the accelerator pedal is released
- When the brake pedal is depressed

Restraining the engine output (Brake Override System)

- When the accelerator and brake pedals are depressed at the same time, the engine output may be restrained.
- A warning message is displayed on the multi-information display while the system is operating.

Breaking in your new Lexus

To extend the life of the vehicle, observing the following precautions is recommended:

- For the first 186 miles (300 km):

Avoid sudden stops.

- For the first 621 miles (1000 km):

- Do not drive at extremely high speeds.
- Avoid sudden acceleration.
- Do not drive continuously in low gears.
- Do not drive at a constant speed for extended periods.

Drum-in-disc type parking brake system

Your vehicle has a drum-in-disc type parking brake system. This type of brake system needs bedding-down of the brake shoes periodically or whenever the parking brake shoes and/or drum are replaced. Have your Lexus dealer perform the bedding down operation.

Operating your vehicle in a foreign country

Comply with the relevant vehicle registration laws and confirm the availability of the correct fuel. (→P.491)

Idling time before engine stop

To prevent damage to the turbocharger, allow the engine to idle immediately after high-speed driving or hill climbing.

Driving condition	Idling time
Normal city driving	Not necessary
High-speed driving (Constant speed of approx. 62 mph [100km/h])	Not necessary
Steep hill driving or continuous driving at 62 mph (100 km/h) or more (race track driving etc.)	Approximately 1 minute

WARNING

Observe the following precautions. Failure to do so may result in death or serious injury.

When starting the vehicle

Always keep your foot on the brake pedal while stopped with the engine running. This prevents the vehicle from creeping.

When driving the vehicle

- Do not drive if you are unfamiliar with the location of the brake and accelerator pedals to avoid depressing the wrong pedal.
- Accidentally depressing the accelerator pedal instead of the brake pedal will result in sudden acceleration that may lead to an accident.
- When backing up, you may twist your body around, leading to a difficulty in operating the pedals. Make sure to operate the pedals properly.
- Make sure to keep a correct driving posture even when moving the vehicle only slightly. This allows you to depress the brake and accelerator pedals properly.
- Depress the brake pedal using your right foot. Depressing the brake pedal using your left foot may delay response in an emergency, resulting in an accident.

WARNING

- Do not drive the vehicle over or stop the vehicle near flammable materials. The exhaust system and exhaust gases can be extremely hot. These hot parts may cause a fire if there is any flammable material nearby.
- During normal driving, do not turn off the engine. Turning the engine off while driving will not cause loss of steering or braking control, but the power assist to these systems will be lost. This will make it more difficult to steer and brake, so you should pull over and stop the vehicle as soon as it is safe to do so.
  However, in the event of an emergency, such as if it becomes impossible to stop the vehicle in the normal way: →P.448
- Use engine braking (downshift) to maintain a safe speed when driving down a steep hill.
  Using the brakes continuously may cause the brakes to overheat and lose effectiveness. (→P.173)
- Do not adjust the positions of the steering wheel, the seat, or the inside or outside rear view mirrors while driving.
  Doing so may result in a loss of vehicle control.
- Always check that all passengers' arms, heads or other parts of their body are not outside the vehicle.
- Do not drive in excess of the speed limit. Even if the legal speed limit permits it, do not drive over 85 mph (140 km/h) unless your vehicle has high-speed capability tires. Driving over 85 mph (140 km/h) may result in tire failure, loss of control and possible injury. Be sure to consult a tire dealer to determine whether the tires on your vehicle are high-speed capability tires or not before driving at such speds.

When driving on slippery road surfaces

- Sudden braking, acceleration and steering may cause tire slippage and reduce your ability to control the vehicle.
- Sudden acceleration, engine braking due to shifting, or changes in engine speed could cause the vehicle to skid.
- After driving through a puddle, lightly depress the brake pedal to make sure that the brakes are functioning properly. Wet brake pads may prevent the brakes from functioning properly. If the brakes on only one side are wet and not functioning properly, steering control may be affected.

When shifting the shift position

- Do not let the vehicle roll backward while a forward driving position is selected, or roll forward while the shift position is in R.
  Doing so may cause the engine to stall or lead to poor brake and steering performance, resulting in an accident or damage to the vehicle.
- Do not shift the shift position to P while the vehicle is moving.
  Doing so can damage the transmission and may result in a loss of vehicle control.
- Do not shift the shift position to R while the vehicle is moving forward.
  Doing so can damage the transmission and may result in a loss of vehicle control.
- Do not shift the shift position to a driving position while the vehicle is moving backward.
  Doing so can damage the transmission and may result in a loss of vehicle control.

WARNING

- Changing the shift position to N while the vehicle is moving will disengage the engine from the transmission. Engine braking is not available when N is selected.
- Be careful not to change the shift position with the accelerator pedal depressed. Changing the shift position to any positions other than P or N may lead to unexpected rapid acceleration of the vehicle that may cause an accident and result in death or serious injury.
  After changing the shift position, make sure to confirm the current shift position displayed on the shift position indicator inside the meter.

■ Brake pad wear

If any of the following situations occurs, have the brake pads visually checked and replaced by your Lexus dealer as soon as possible.

- If the brake pad wear limit of a brake pad is found to have been exceeded when visually checking the brake pads for each wheel (for the brake pad wear limit, refer to P.495)
- If a warning message is displayed on the multi-information display (only the right-side pads can be detected)

Rotor damage may result if the pads are not replaced when needed.

It is dangerous to drive the vehicle when the wear limits of the brake pads and/or those of the brake discs are exceeded.

■ When the vehicle is stopped

- Do not race the engine.
  If the vehicle is in any gear other than P or N, the vehicle may accelerate suddenly and unexpectedly, causing an accident.
- In order to prevent accidents due to the vehicle rolling away, always keep depressing the brake pedal while the engine is running, and apply the parking brake as necessary.
- If the vehicle is stopped on an incline, in order to prevent accidents caused by the vehicle rolling forward or backward, always depress the brake pedal and securely apply the parking brake as needed.
- Avoid revving or racing the engine. Running the engine at high speed while the vehicle is stopped may cause the exhaust system to overheat, which could result in a fire if combustible material is nearby.

■ When the vehicle is parked

- Do not leave glasses, cigarette lighters, spray cans, or soft drink cans in the vehicle when it is in the sun.
  Doing so may result in the following:
  - Gas may leak from a cigarette lighter or spray can, and may lead to a fire.
  - The temperature inside the vehicle may cause the plastic lenses and plastic material of glasses to deform or crack.
  - Soft drink cans may fracture, causing the contents to spray over the interior of the vehicle, and may also cause a short circuit in the vehicle's electrical components.
- Do not leave cigarette lighters in the vehicle. If a cigarette lighter is in a place such as the glove box or on the floor, it may be lit accidentally when luggage is loaded or the seat is adjusted, causing a fire.
- Do not attach adhesive discs to the windshield or windows. Do not place containers such as air fresheners on the instrument panel or dashboard. Adhesive discs or containers may act as lenses, causing a fire in the vehicle.

WARNING

- Do not leave a door or window open if the curved glass is coated with a metallized film such as a silver-colored one. Reflected sunlight may cause the glass to act as a lens, causing a fire.
- Always apply the parking brake, shift the shift position to P, stop the engine and lock the vehicle.
  Do not leave the vehicle unattended while the engine is running.
  If the vehicle is parked with the shift position in P but the parking brake is not set, the vehicle may start to move, possibly leading to an accident.
- Do not touch the exhaust pipes while the engine is running or immediately after turning the engine off.
  Doing so may cause burns.

When taking a nap in the vehicle

Always turn the engine off. Otherwise, if you accidentally move the shift lever or depress the accelerator pedal, this could cause an accident or fire due to engine overheating. Additionally, if the vehicle is parked in a poorly ventilated area, exhaust gases may collect and enter the vehicle, leading to death or a serious health hazard.

When braking

- When the brakes are wet, drive more cautiously.
  Braking distance increases when the brakes are wet, and this may cause one side of the vehicle to brake differently than the other side. Also, the parking brake may not securely hold the vehicle.
- If the brake booster device does not operate, do not follow other vehicles closely and avoid hills or sharp turns that require braking.
  In this case, braking is still possible, but the brake pedal should be depressed more firmly than usual. Also, the braking distance will increase. Have your brakes fixed immediately.
- Do not pump the brake pedal if the engine stalls.
  Each push on the brake pedal uses up the reserve for the power-assisted brakes.
- The brake system consists of 2 individual hydraulic systems; if one of the systems fails, the other will still operate. In this case, the brake pedal should be depressed more firmly than usual and the braking distance will increase.
  Have your brakes fixed immediately.

If the vehicle becomes stuck

Do not spin the wheels excessively when a driven wheel is up in the air, or the vehicle is stuck in sand, mud, etc. This may damage the driveline components or propel the vehicle forward or backward, causing an accident.

NOTICE

When driving the vehicle

- Do not depress the accelerator and brake pedals at the same time during driving, as this may restrain the engine output.
- Do not use the accelerator pedal or depress the accelerator and brake pedals at the same time to hold the vehicle on a hill.

When parking the vehicle

Always set the parking brake, and shift the shift position to P. Failure to do so may cause the vehicle to move or the vehicle may accelerate suddenly if the accelerator pedal is accidentally depressed.

Avoiding damage to vehicle parts

- Do not turn the steering wheel fully in either direction and hold it there for an extended period of time.
  Doing so may damage the power steering.

NOTICE

- When driving over bumps in the road, drive as slowly as possible to avoid damaging the wheels, underside of the vehicle, etc.
- Make sure to idle the engine immediately after high-load driving. Stop the engine only after the turbocharger has cooled down.
  Failure to do so may cause damage to the turbocharger.

■ If you get a flat tire while driving

A flat or damaged tire may cause the following situations. Hold the steering wheel firmly and gradually depress the brake pedal to slow down the vehicle.

- It may be difficult to control your vehicle.
- The vehicle will make abnormal sounds or vibrations.
- The vehicle will lean abnormally.

Information on what to do in case of a flat tire (→P.472)

■ When encountering flooded roads

Do not drive on a road that has flooded after heavy rain etc. Doing so may cause the following serious damage to the vehicle:

- Engine stalling
- Short in electrical components
- Engine damage caused by water immersion

In the event that you drive on a flooded road and the vehicle is flooded, be sure to have your Lexus dealer check the following:

- Brake function
- Changes in quantity and quality of oil and fluid used for the engine, transmission, transfer (AWD models), differential, etc.
- Lubricant condition for the propeller shaft, bearings and suspension joints (where possible), and the function of all joints, bearings, etc.

If the shift control system is damaged by flooding, it may not be possible to shift the shift position to P, or from P to other positions. In this case, contact your Lexus dealer.

Sudden start restraint control (Drive-Start Control [DSC])

When the following unusual operation is performed with the accelerator pedal depressed, the engine output may be restrained.

- When the shift lever is shifted to R*.
- When the shift lever is shifted from P or R to forward drive shift position such as D*.

When the system operates, a message appears on the multi-information display. Read the message and follow the instruction.

*: Depending on the situation, the shift position may not be changed.

■ Drive-Start Control (DSC)

When the TRAC is turned off (→P.331), sudden start restraint control also does not operate. If your vehicle have trouble escaping from the mud or fresh snow due to sudden start restraint control operation, deactivate TRAC (→P.331) so that the vehicle may become able to escape from the mud or fresh snow.

Cargo and luggage

Take notice of the following information about storage precautions, cargo capacity and load:

Capacity and distribution

Cargo capacity depends on the total weight of the occupants.

(Cargo capacity) = (Total load capacity) – (Total weight of occupants)

Steps for Determining Correct Load Limit –

(1) Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle's placard.

(2) Determine the combined weight of the driver and passengers that will be riding in your vehicle.

(3) Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.

(4) The resulting figure equals the available amount of cargo and luggage load capacity.

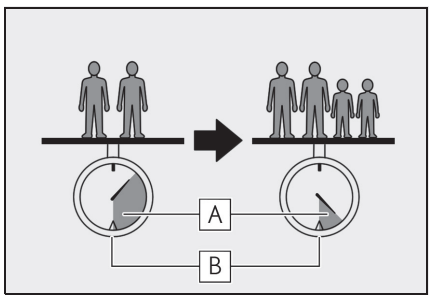
For example, if the "XXX" amount equals 1400 lbs. and there will be five 150 lb passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400 – 750 (5 × 150) = 650 lbs.)

(5) Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.

(6) If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle. (→P.167)

Lexus does not recommend towing a trailer with your vehicle. Your vehicle is not designed for trailer towing.

Calculation formula for your vehicle



A Cargo capacity

B Total load capacity (vehicle capacity weight) (→P.490)

When 2 people with the combined weight of A lb. (kg) are riding in your vehicle, which has a total load capacity (vehicle capacity weight) of B lb. (kg), the available amount of cargo and luggage load capacity will be C lb. (kg) as follows:

B*2 lb. (kg) - A*1 lb. (kg) = C*3 lb. (kg)

*1: A =Weight of people

*2: B =Total load capacity

*3: C =Available cargo and luggage load

In this condition, if 3 more passengers with the combined weight of D lb. (kg) get on, the available cargo and luggage load will be reduced E lb. (kg) as follows:

C lb. (kg) - D*4 lb. (kg) = E*5 lb. (kg)

*4: D =Additional weight of people

*5: E =Available cargo and luggage load

As shown in the example above, if the number of occupants increases, the cargo and luggage load will be reduced by an amount that equals the increased weight due to the additional occupants. In other words, if an increase in the number of occupants causes an excess of the total load capacity (combined weight of occupants plus cargo and luggage load), you must reduce the cargo and luggage on your vehicle.

WARNING

■ Things that must not be carried in the trunk

The following things may cause a fire if loaded in the trunk:

- Receptacles containing gasoline
- Aerosol cans

■ Storage precautions

Observe the following precautions. Failure to do so may prevent the pedals from being depressed properly, may block the driver's vision, or may result in items hitting the driver or passengers, possibly causing an accident.

- Stow cargo and luggage in the trunk whenever possible.
- Do not place cargo or luggage in or on the following locations.
  - At the feet of the driver
  - On the front passenger or rear seats (when stacking items)
  - On the package tray
  - On the instrument panel
  - On the dashboard
  - In front of the Center Display
- Secure all items in the occupant compartment.

■ Capacity and distribution

- Do not exceed the maximum axle weight rating or the total vehicle weight rating.
- Even if the total load of occupant's weight and the cargo load is less than the total load capacity, do not apply the load unevenly. Improper loading may cause deterioration of steering or braking control which may cause death or serious injury.

Vehicle load limits

Vehicle load limits include total load capacity, seating capacity, towing capacity and cargo capacity.

- Total load capacity (vehicle capacity weight): →P.490

Total load capacity means the combined weight of occupants, cargo and luggage.

- Seating capacity: →P.490

Seating capacity means the maximum number of occupants whose estimated average weight is 150 lb. (68 kg) per person.

- Towing capacity

Lexus does not recommend towing a trailer with your vehicle.

- Cargo capacity

Cargo capacity may increase or decrease depending on the weight and the number of occupants.

Total load capacity and seating capacity

These details are also described on the tire and loading information label. (→P.434)

WARNING

Overloading the vehicle

Do not overload the vehicle.
It may not only cause damage to the tires, but also degrade steering and braking ability, resulting in an accident.

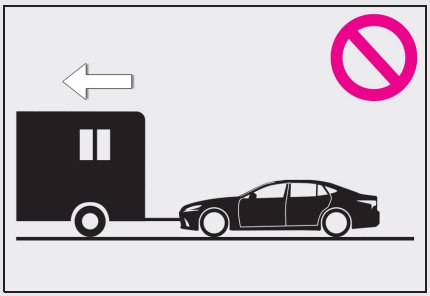
Trailer towing

Lexus does not recommend towing a trailer with your vehicle. Lexus also does not recommend the installation of a tow hitch or the use of a tow hitch carrier for a wheelchair, scooter, bicycle, etc. Your vehicle is not designed for trailer towing or for the use of tow hitch mounted carriers.



Dinghy towing

Your vehicle is not designed to be dinghy towed (with 4 wheels on the ground) behind a motor home.



NOTICE

■ To avoid serious damage to your vehicle

Do not tow your vehicle with the four wheels on the ground.

Engine (ignition) switch

Performing the following operations when carrying the electronic key on your person starts the engine or changes engine switch modes.

Starting the engine

1 Press the parking brake switch to check that the parking brake is set. (→P.180)

The parking brake indicator will come on.

2 Firmly depress the brake pedal.

and a message will be displayed on the multi-information display.
If it is not displayed, the engine cannot be started.

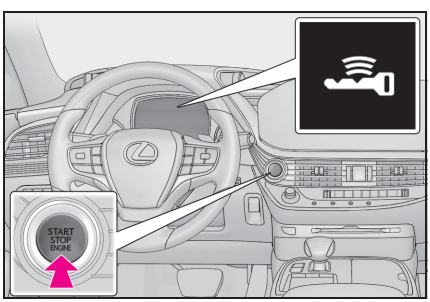
3 Press the engine switch shortly and firmly.

When operating the engine switch, one short, firm press is enough. It is not necessary to press and hold the switch.

The engine will crank until it starts or for up to 30 seconds, whichever is less.

Continue depressing the brake pedal until the engine is completely started.

The engine can be started from any engine switch mode.



■ **Engine switch illumination**

According to the situation, the engine switch illumination operates as follows.

- When driver's door or front passenger's door is opened, or the engine switch mode is changed from ACCESSORY or IGNITION ON mode to off, the engine switch light will illuminate dimly.
- When depressing the brake pedal with carrying the electronic key on your person, the engine switch light will illuminate brightly.
- When the engine switch is in ACCESSORY or IGNITION ON mode, the engine switch illumination illuminates.

■ **If the engine does not start**

- The engine immobilizer system may not have been deactivated. (→P.61) Contact your Lexus dealer.
- If a message related to start-up is shown on the multi-information display, read the message and follow the instructions.
- If the door is unlocked with the mechanical key, the engine cannot be started using the smart access system with push-button start. Refer to P.475to start the engine. However, if the electronic key is carried inside the vehicle and the doors are locked (→P.99), the engine can be started.

■ **If the battery is discharged**

The engine cannot be started using the smart access system with push-button start. Refer to P.478to restart the engine.

■ **Electronic key battery depletion**

→P.90

■ **Conditions affecting operation**

→P.110

■ **Notes for the entry function**

→P.111

■ **When "Check Fuel Cap" is displayed on the multi-information display**

→P.194

■ Electronic key battery

→P.439

■ Operation of the engine switch

- If the switch is not pressed shortly and firmly, the engine switch mode may not change or the engine may not start.
- If attempting to restart the engine immediately after turning the engine switch off, the engine may not start in some cases. After turning the engine switch off, please wait a few seconds before restarting the engine.

■ Customization

If the smart access system with push-button start has been deactivated in a customized setting, refer to P.475.

WARNING

■ When starting the engine

Always start the engine while sitting in the driver's seat. Do not depress the accelerator pedal while starting the engine under any circumstances. Doing so may cause an accident resulting in death or serious injury.

NOTICE

■ When starting the engine

- Do not race a cold engine.
- If the engine becomes difficult to start or stalls frequently, have your vehicle checked by your Lexus dealer immediately.

■ Symptoms indicating a malfunction with the engine switch

If the engine switch seems to be operating somewhat differently than usual, such as the switch sticking slightly, there may be a malfunction. Contact your Lexus dealer immediately.

Stopping the engine

1. Stop the vehicle completely.
2. If the parking brake is in manual mode, set the parking brake. (→P.180)
3. Press the P position switch. (→P.174)

Check that the shift position indicator shows P and the parking brake indicator is illuminated.

4. Press the engine switch.

The engine will stop, and the meter display will be extinguished (the shift position indicator will be extinguished a few seconds after the meter display).

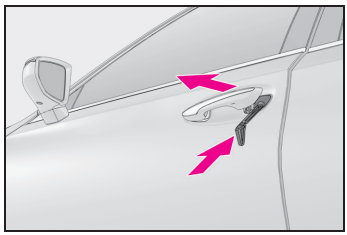
5. Release the brake pedal and check that "ACCESSORY" or "IGNITION ON" is not shown on the meter.

■ Automatic engine shut off feature

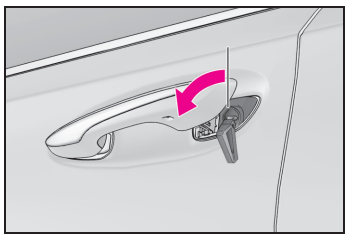
- The vehicle is equipped with a feature that automatically shuts off the engine when the shift position is in P with the engine running for an extended period.
- The engine will automatically shut off after approximately 1 hour if it has been left running while the shift position is in P.
- The timer for the automatic engine shut off feature will reset if the brake pedal is depressed or if the shift position is in a position other than P.
- After the vehicle is parked, if the door is locked with the door lock switch (→P.99) from the inside or the mechanical key from the outside, the automatic engine shut off feature will be disabled. The timer for the automatic engine shut off feature will be re-enabled if the driver's door is opened.

■ **Locking the door from outside with the engine running**

1 With the driver's door open, pull the driver's door handle and insert the mechanical key.



2 Turn the mechanical key counterclockwise.



3 Pull out the mechanical key and close the door.

■ **Automatic P position selection function**

→P.175

⚠ WARNING

■ **Stopping the engine in an emergency**

- If you want to stop the engine in an emergency while driving the vehicle, press and hold the engine switch for more than 2 seconds, or press it briefly 3 times or more in succession. (→P.448)
  However, do not touch the engine switch while driving except in an emergency. Turning the engine off while driving will not cause loss of steering or braking control, however, power assist to the steering will be lost. This will make it more difficult to steer smoothly, so you should pull over and stop the vehicle as soon as it is safe to do so.
- If the engine switch is operated while the vehicle is running, a warning message will be shown on the multi-information display and a buzzer sounds.
- To restart the engine after performing an emergency shutdown, shift the shift position to N and then press the engine switch.

■ **When parking**

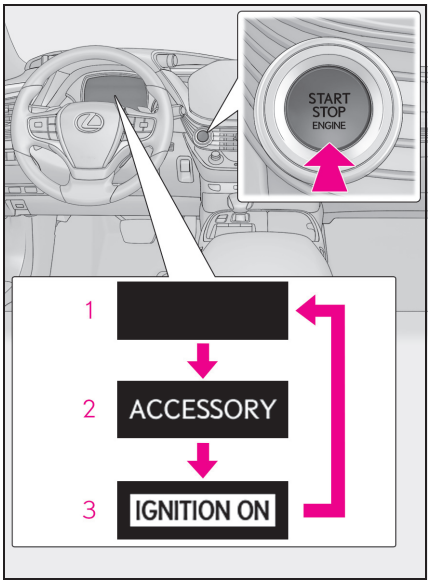
Exhaust gases include harmful carbon monoxide (CO), which is colorless and odorless. Observe the following precautions.

Failure to do so may cause exhaust gases to enter the vehicle and may lead to an accident caused by light-headedness, or may lead to death or a serious health hazard.

- If the vehicle is in a poorly ventilated area or a closed area, such as a garage, stop the engine.
- Do not leave the vehicle with the engine running for a long time. If such a situation cannot be avoided, park the vehicle in an open space and ensure that exhaust fumes do not enter the vehicle interior.
- Do not leave the engine running in an area with snow build-up, or where it is snowing. If snowbanks build up around the vehicle while the engine is running, exhaust gases may collect and enter the vehicle.

Changing engine switch modes

Modes can be changed by pressing the engine switch with the brake pedal released. (The mode changes each time the switch is pressed.)



1 OFF

The emergency flashers can be used.

2 ACCESSORY mode*

Some electrical components such as the audio system can be used.

"ACCESSORY" will be displayed on the meter.

3 IGNITION ON mode

All electrical components can be used.

"IGNITION ON" will be displayed on the meter.

*: ACCESSORY mode can be enabled/disabled on the customize menu. (→P.510)

When ACCESSORY mode customization is in off

With the engine switch is turned off, the multimedia system can still be used for a certain time until the battery saving function starts operating.

Auto power off function

- If the vehicle is left in ACCESSORY mode or IGNITION ON mode (the engine is not operating) for more than 20 minutes with the shift position in P, the engine switch will automatically turn to OFF.
- If the battery is low with the shift position is in P and the engine switch is in ACCESSORY mode or IGNITION ON mode (the engine is not operating). The engine switch is automatically turn to OFF.

However, this function cannot entirely prevent the battery discharge. Do not leave the vehicle with the engine switch in ACCESSORY or IGNITION ON mode for long periods of time when the engine is not running.

When the shift control system malfunctions

When attempting to turn the engine switch off while there is a malfunction in the shift control system, the engine switch mode may change to ACCESSORY mode. In this case, ACCESSORY mode may be turned off by applying the parking brake and pressing the engine switch again. If there is a malfunction in the system, have the vehicle inspected by your Lexus dealer immediately.

NOTICE

To prevent battery discharge

- Do not leave the engine switch in ACCESSORY or IGNITION ON mode for long periods of time without the engine running.
- If "ACCESSORY" or "IGNITION ON" is displayed on the meter, the engine switch is not off.
  Exit the vehicle after turning the engine switch off.

Automatic transmission

Select the shift position depending on your purpose and situation.

Shift position purpose and functions

Shift position	Objective or function
P	Parking the vehicle/starting the engine
R	Reversing
N	Neutral (Condition in which the power is not transmitted)
D	Normal driving*1
M	M mode driving*2 (→P.177)

*1: To improve fuel efficiency and reduce noise, set the shift position in D for normal driving. You can choose gear range suitable for your driving situation by operating the paddle shift switches.

*2: Any gear range can be fixed when driving in M mode.

■ To protect the automatic transmission

If the automatic transmission fluid temperature is high, "Transmission Fluid Temp High See Owner's Manual" will be displayed on the multi-information display and the vehicle will go into transmission protection mode automatically. Have the vehicle inspected by your Lexus dealer.

■ When driving with the dynamic radar cruise control

Even when performing the following actions with the intent of enabling engine braking, engine braking will not activate because the dynamic radar cruise control will not be canceled.

- While driving in the D position, downshifting to 9, 8, 7, 6, 5 or 4.
- When switching the driving mode to sport mode while driving in the D position (→P.325)

■ Sudden start restraint control (Drive-Start Control [DSC])

→P.164

■ AI-SHIFT

The AI-SHIFT automatically selects the suitable gear according to driver performance and driving conditions.
The AI-SHIFT automatically operates when the shift position is in D. (Shifting the shift position to the M position cancels the function.)

■ If a message about a shift operation is shown

To prevent the shift position from being selected incorrectly or the vehicle from moving unexpectedly, the shift position may be changed automatically or operating the shift lever may be required. In this case, change the shift position following the messages on the multi-information display.

■ After recharging/reconnecting the battery

→P.417

WARNING

■ When driving on slippery road surfaces

Do not accelerate or shift the shift position suddenly.
Sudden changes in engine braking may cause the vehicle to spin or skid, resulting in an accident.

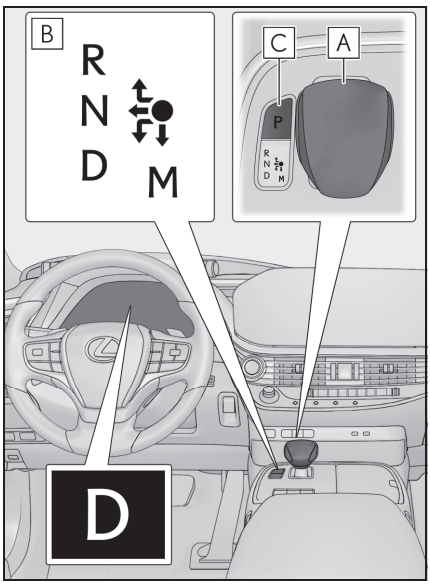
NOTICE

■ **Situations where shift control system malfunctions are possible**

If any of the following situations occurs, shift control system malfunctions are possible.
Immediately stop the vehicle in a safe place on level ground, apply the parking brake, and then contact your Lexus dealer.

- When the warning message indicating the shift control system appears on the multi-information display. (→P.467)
- The display indicates that no shift position is selected for more than a few seconds.

Shift position display and how to change the shift position



A Shift lever

Operate the shift lever gently and securely in the direction of the arrow on the shift position indicator.

To shift to N, slide the shift lever in the direction of the arrow and hold it.

Release the shift lever after each shifting operation to allow it to return to its regular position (●).

Shifting to M is only possible when the shift position is in D.

When shifting from P to N, D or R, from N, D, M or R to P, from D or M to R, or from R to D, ensure that the brake pedal is being depressed and the vehicle is stationary.

B Shift position indicator

Meter display:

The current shift position is illuminated.

Shift lever display:

The current shift position is illuminated.

When selecting the shift position, make sure that the shift position has been changed to the desired position by checking the shift position indicator provided on the instrument cluster.

C P position switch

Fully stop the vehicle and set the parking brake, and then press the P position switch.

When the shift position is changed to P, the switch illuminates.

Check that the shift position indicator shows P.

■ **Changing the shift position in each engine switch mode**

- The shift position cannot be changed when the engine switch is in ACCESSORY mode or off.
- When the engine switch is in IGNITION ON mode, the shift position can only be changed to N.
- When the engine is running, the shift position can be changed from P to D, N, or R.

■ **Shifting the shift position from P to other positions**

- While depressing the brake pedal firmly,

operate the shift lever. If the shift lever is operated without depressing the brake pedal, the buzzer will sound and the shifting operation will be disabled.

- When selecting the shift position, make sure that the shift position has been changed to the desired position by checking the shift position indicator provided on the instrument cluster.
- The shift position cannot be changed from P to M directly.

The shift position cannot be changed when

In the following situations, a buzzer will sound to inform you that the shift position cannot be changed. Use the appropriate operation to attempt to change the shift position again.

- When attempting to change the shift position from P with the brake pedal not depressed
- When attempting to change the shift position from P with the accelerator pedal depressed
- When attempting to change the shift position from N while stopped or driving at an extremely low speed with the brake pedal not depressed
- When attempting to change the shift position from N while stopped or driving at an extremely low speed with the accelerator pedal depressed
- When attempting to change the shift position from P or N to M
- When the P position switch is pressed while driving

When driving at an extremely low speed, the shift position may change to P.

The shift position automatically changes to N when

In the following situations, a buzzer will sound to inform you that the shift position has been changed to N. Use the appropriate operation to attempt to change the shift position again.

- When attempting to change the shift position to R while the vehicle is moving forward

When driving at a low speed, the shift position may change to R.

- When attempting to change the shift position to D while the vehicle is moving backward

When driving at a low speed, the shift position may change to D.

- When attempting to change the shift position from R to M

If the N shift position is selected while driving

If the shift lever is moved to N while driving above a certain speed, the shift position will change to N without holding the shift lever in the N position. In this situation, a buzzer will sound and a message will be displayed on the multi-information display to inform you that the shift position has been changed to N.

Automatic P position selection function

In the following situations, the shift position is automatically changed to P.

- When pressing the engine switch with the vehicle stopped while the engine switch is in IGNITION ON mode and the shift position is in a position other than P (after the shift position has changed to P, the engine switch will turn off)*
- If the driver's door is opened and all of the following conditions are met, while the shift position is in a position other than P
  - The engine switch is in IGNITION ON mode.
  - The driver is not wearing the seat belt.
  - The brake pedal is not depressed.

To start off the vehicle after the shift position is changed to P, operate the shift lever again.

- When the vehicle is stopped after the engine has been stopped in an emergency while driving.
- When voltage of the battery drops while the shift position is in a position other than P.

*: When the engine switch is pressed while driving at extremely slow speeds, such

as immediately before stopping the vehicle, the shift position may automatically change to P. Make sure that the vehicle is completely stopped before pressing the engine switch.

■ **If the shift position cannot be shifted from P**

There is a possibility that the battery is discharged. Check the battery in this situation. (→P.478)

■ **Customization**

Some functions can be customized. (→P.510)

WARNING

■ **For the shift lever**

- Do not remove the shift lever knob or use anything but a genuine Lexus shift lever knob. Also, do not hang anything on the shift lever.
  Doing so could prevent the shift lever from returning to position, causing unexpected accidents to occur when the vehicle is in motion.
- In order to prevent the shift position from accidentally being changed, do not touch the shift lever when not using them.

■ **P position switch**

- Do not press the P position switch while the vehicle is moving.

If the P position switch is pressed when driving at very low speeds (for example, directly before stopping the vehicle), the vehicle may stop suddenly when the shift position switches to P, which could lead to an accident.

- In order to prevent the shift position from accidentally being changed, do not touch the P position switch when not using them.

NOTICE

■ **Notes regarding shift lever and P position switch operation**

Avoid repeatedly operating the shift lever and P position switch in quick succession.
The system protection function may activate and it will not be temporarily possible to shift the shift position other than P. If this happens, please wait for a while before attempting to change the shift position again.

■ **When exiting the vehicle (driver's seat only)**

Check that the shift position indicator shows P and that the parking brake indicator is illuminated before opening the door and exiting the vehicle.

Selecting the driving mode

■ **Driving mode**

→P.325

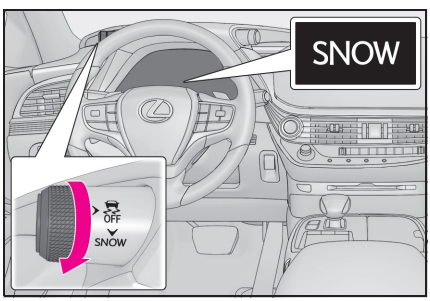
■ **Snow mode**

Snow mode can be selected to suit the conditions when driving on slippery road surfaces, such as on snow.

Turn the snow mode switch backward.

The snow mode indicator illuminates.

Turn the snow mode switch backward again to return to normal mode.



■ Snow mode automatic deactivation

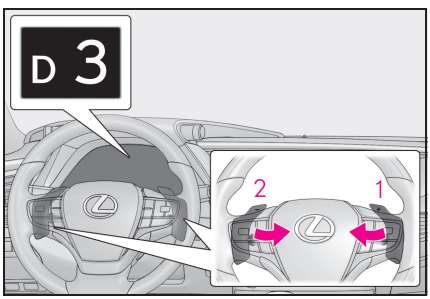
Snow mode is automatically deactivated if the engine switch is turned off after driving in snow mode.

Selecting shift ranges in the D position

To drive using temporary shift range selection, operate the "-" or "+" paddle shift switch.

When the "-" paddle shift switch is operated, the shift range switches to a range that enables engine braking force that is suitable to driving conditions. When the "+" paddle shift switch is operated, the shift range switches to a range that is one range higher than the current range.

Changing the shift range allows restriction of the highest gear, preventing unnecessary upshifting and enabling the level of engine braking force to be selected.



1 Upshifting

2 Downshifting

The selected shift range, from D1 to D10, will be displayed on the meter.

To return to normal D position driving, the "+" paddle shift switch must be held down for a period of time.

Meter display	Function
D2 - D10	A gear in the range between D1 and the selected shift range is automatically chosen depending on vehicle speed and driving conditions
D1	Setting the shift range at D1

A lower shift range will provide greater engine braking forces than a higher shift range.

■ Automatic deactivation of shift range selection in the D position

Shift range selection in the D position will be deactivated in the following situations:

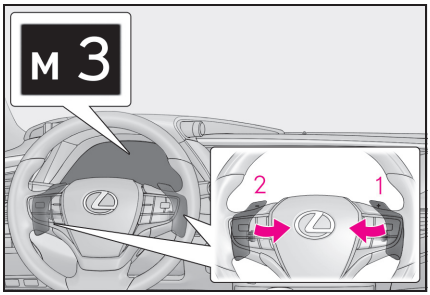
- When the vehicle comes to a stop
- If the accelerator pedal is depressed for more than a certain period of time
- When the shift position is shifted to a position other than D.
- When pressing and holding the "+" paddle shift switch

■ Downshifting restriction warning buzzer

To help ensure safety and driving performance, downshifting operation may sometimes be restricted. In some circumstances, downshifting may not be possible even when the paddle shift switch is operated. (A buzzer will sound twice.)

Selecting gears in the M position

To enter M mode, shift the shift position to M. Gears can be selected by operating the paddle shift switches, allowing you to drive in the gear of your choosing.



1 Upshifting

2 Downshifting

The gear changes once every time the paddle shift switch is operated.

The selected gear, from M1 to M10, will be fixed and displayed on the meter.

When in the M position, the gear will not change unless the paddle shift switches are operated.

However, even when in the M position, the gears will be automatically changed in the following situations:

- When vehicle speed drops (downshift only).
- When it is necessary to protect the engine or automatic transmission when the engine coolant temperature is low, the automatic transmission fluid temperature is high or low, or other reasons.

Also, the gear will not shift when the vehicle speed is low, even if an upshift operation is performed.

Downshifting restriction warning buzzer

To help ensure safety and driving performance, downshifting operation may sometimes be restricted. In some circumstances, downshifting may not be possible even when the paddle shift switch is operated. (A buzzer will sound twice.)

Keeping the shift position in N without activating the automatic P position selection function

- By performing the following operation, the shift position can be held in N until the shift position switches to P without activating the automatic P position switching selection function.

1 Operate the shift lever and change the shift position to N when the engine is running.

2 Return the shift lever to its regular position (●).

3 Operate the shift lever to N and hold it there until the buzzer sounds.

4 Press the engine switch within 5 seconds after the buzzer sounds.

The engine stops with the shift position in N*

Make sure to check that the buzzer sounds and “Holding N Push P Switch When Done” is displayed on the multi-information display.

- In order to shift to a position other than N, first press the P position switch to change the shift position to P.
- If the automatic P position switching operation selection function is performed operated with the engine stopped, the automatic P position switching selection function may not operate.Always perform the operation with the engine started.

*: To keep this state, do not operate the engine switch. If the engine switch is operated repeatedly, the engine switch will turn off after the shift position has automatically changed to P.

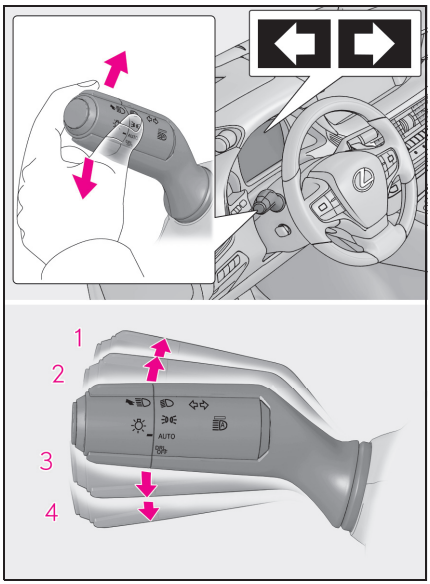
NOTICE

■ **Keeping the shift position in N without activating the automatic P position selection function**

Make sure that the engine is started. If an operation is performed when the engine is not started, the shift position may change to P.

Turn signal lever

Operating instructions



1 Right turn

2 Lane change to the right (move the lever partway and release it)

The right hand signals will flash 3 times.

3 Lane change to the left (move the lever partway and release it)

The left hand signals will flash 3 times.

4 Left turn

■ **Turn signals can be operated when**

The engine switch is in IGNITION ON mode.

■ **If you want to stop the turn signals flashing**

Operate the lever in the opposite direction to either position **2** or **3**.

■ **If the indicator flashes faster than usual**

Check that a light bulb in the front or rear turn signal lights has not burned out.

■ If the turn signals stop flashing before a lane change has been performed

Operate the lever again.

Parking brake

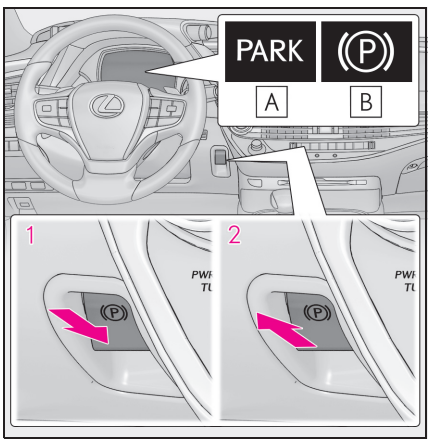
The parking brake can be set or released automatically or manually.

In automatic mode, the parking brake can be set or released automatically according to the shift lever operation. Also, even in automatic mode, the parking brake can be set or released manually.

Operating instructions

■ Using the manual mode

The parking brake can be set and released manually.



A U.S.A.

B Canada

1 Push the switch to set the parking brake

The parking brake indicator light will turn on.

Press and hold the parking brake switch if an emergency occurs and it is necessary to operate the parking brake while driving.

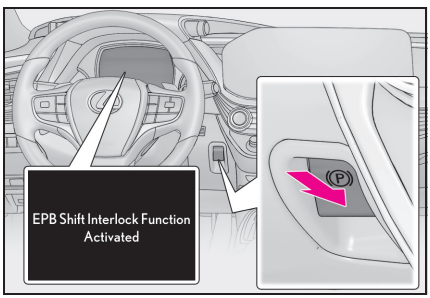
2 Pull the switch to release the parking brake

- Operate the parking brake switch while depressing the brake pedal.
- Using the parking brake automatic release function, the parking brake can be released by depressing the accelerator pedal. When using this function, slowly depress the accelerator pedal.

Make sure that the parking brake indicator light turn off.

Turns automatic mode on

While the vehicle is stopped, press and hold the parking brake switch until a message is shown on the multi-information display.



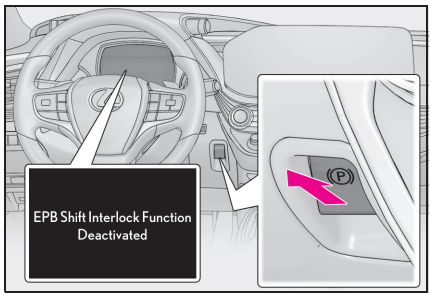
When the automatic mode is turned on, the parking brake operates as follows.

- When the shift position is shifted from P, the parking brake will be released, and the parking brake indicator light will turn off.
- When the shift position is shifted to P, the parking brake will be set, and the parking brake indicator light will turn on.

Operate the shift lever and P position switch with the vehicle stopped and the brake pedal depressed.

Turns automatic mode off

While the vehicle is stopped, pull and hold the parking brake switch until a message is shown on the multi-information display.



Parking brake operation

- When the engine switch is not in IGNITION ON mode, the parking brake cannot be released using the parking brake switch.
- When the engine switch is not in IGNITION ON mode, automatic mode (automatic brake setting and releasing) is not available.

Parking brake automatic release function

- When the shift position is shifted from P, the parking brake will be released in automatic mode.
- When all of the following conditions are met in manual mode, the parking brake can be released by depressing the accelerator pedal.
  - The driver's door is closed
  - The driver is wearing the seat belt
  - The shift position is in D, M or R

If "Parking Brake Temporarily Unavailable" is displayed on the multi-information display

If the parking brake is operated repeatedly over a short period of time, the system may restrict operation to prevent overheating. If this happens, refrain from operating the parking brake. Normal operation will return after about 1 minute.

■ **If "EPB Activation Stopped Incompletely" or "Parking Brake Unavailable" is displayed on the multi-information display**

Operate the parking brake switch. If the message does not disappear after operating the switch several times, the system may be malfunctioning. Have the vehicle inspected by your Lexus dealer.

■ **Parking brake operation sound**

When the parking brake operates, a motor sound (whirring sound) may be heard. This does not indicate a malfunction.

■ **Parking brake operation**

- Depending on the engine switch mode, the parking brake indicator light will turn on and stay on as described below:
  IGNITION ON mode: Comes on until the parking brake is released.
  Not in IGNITION ON mode: Stays on for approximately 15 seconds.
- When the engine switch is turned off with the parking brake set, the parking brake indicator light will stay on for about 15 seconds. This does not indicate a malfunction.

■ **When the parking brake switch malfunctions**

Automatic mode (automatic brake setting and releasing) will be turned on automatically.

■ **Parking the vehicle**

→P.159

■ **Parking brake engaged warning buzzer**

A buzzer will sound if the vehicle is driven with the parking brake engaged. "Parking Brake ON" is displayed on the multi-information display. (with the vehicle reached a speed of 3 mph [5 km/h])

■ **If the brake system warning light comes on**

→P.457

■ **Usage in winter time**

→P.335

WARNING

■ **When parking the vehicle**

Do not leave a child in the vehicle alone. The parking brake may be released unintentionally and there is the danger of the vehicle moving that may lead to an accident resulting in death or serious injury.

NOTICE

■ **When parking the vehicle**

Before you leave the vehicle, set the parking brake, shift the shift position to P and make sure that the vehicle does not move.

■ **When the system malfunctions**

Stop the vehicle in a safe place and check the warning messages.

■ **When the parking brake cannot be released due to a malfunction**

Driving the vehicle with the parking brake set will lead to brake components overheating, which may affect braking performance and increase brake wear.

Have the vehicle inspected by your Lexus dealer immediately if this occurs.

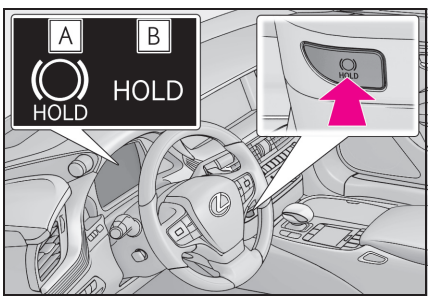
Brake Hold

The brake hold system keeps the brake applied when the shift position is in D, M or N with the system on and the brake pedal has been depressed to stop the vehicle. The system releases the brake when the accelerator pedal is depressed with the shift position in D or M to allow smooth start off.

Enabling the system

Turns the brake hold system on

The brake hold standby indicator (green) A comes on. While the system is holding the brake, the brake hold operated indicator (yellow) B comes on.



■ Brake hold system operating conditions

The brake hold system cannot be turned on in the following conditions:

- The driver's door is not closed.
- The driver is not wearing the seat belt.
- The parking brake is engaged.

If any of the conditions above are detected when the brake hold system is enabled, the system will turn off and the brake hold standby indicator light will go off. In addition, if any of the conditions are detected while the system is holding the brake, a warning buzzer will sound and a message will be shown on the multi-information display. The parking brake will then be set automatically.

■ Brake hold function

- If the brake pedal is left released for a period of about 3 minutes after the system has started holding the brake, the parking brake will be set automatically. In this case, a warning buzzer sounds and a message is shown on the multi-information display.
- To turn the system off while the system is holding the brake, firmly depress the brake pedal and press the button again.
- The brake hold function may not hold the vehicle when the vehicle is on a steep incline. In this situation, it may be necessary for the driver to apply the brakes. A warning buzzer will sound and the multi-information display will inform the driver of this situation. If a warning message is shown on the multi-information display, read the message and follow the instructions.
- When do not wish for the parking brake to operate automatically, press and hold the brake hold switch until the standby indicator (green) turns off, and then turn the engine switch off.

■ When the parking brake is set automatically while the system is holding the brakes

Perform any of the following operations to release the parking brake.

- Depress the accelerator pedal. (The parking brake will not be released automatically if the seat belt is not fastened.)
- Operate the parking brake switch with the brake pedal depressed.

Make sure that the parking brake indicator light goes off. (→P.180)

■ When an inspection at your Lexus dealer is necessary

When the brake hold standby indicator (green) does not illuminate even when the brake hold switch is pressed with the brake hold system operating conditions met, the system may be malfunctioning. Have the

vehicle inspected at your Lexus dealer.

■ **If "Brake Hold Malfunction Press Brake to Deactivate Visit Your Dealer" or "Brake Hold Malfunction Visit Your Dealer" is displayed on the multi-information display**

The system may be malfunctioning. Have the vehicle inspected by your Lexus dealer.

■ **Warning messages and buzzers**

Warning messages and buzzers are used to indicate a system malfunction or to inform the driver of the need for caution. If a warning message is shown on the multi-information display, read the message and follow the instructions.

■ **If the brake hold operated indicator flashes**

→P.462

WARNING

■ **When the vehicle is on a steep incline**

Take care when using the brake hold system on a steep incline exercise caution. The brake hold function may not hold the vehicle in such a situation. Also, the system may not activate depending on the angle of the slope.

■ **When stopped on a slippery road**

The system cannot stop the vehicle when the gripping ability of the tires has been exceeded. Do not use the system when stopped on a slippery road.

NOTICE

■ **When parking the vehicle**

The brake hold system is not designed for use when parking the vehicle for a long period of time. Turning the engine switch off while the system is holding the brake may release the brake, which would cause the vehicle to move. When operating the engine switch, depress the brake pedal, shift the shift position to P and set the parking brake.

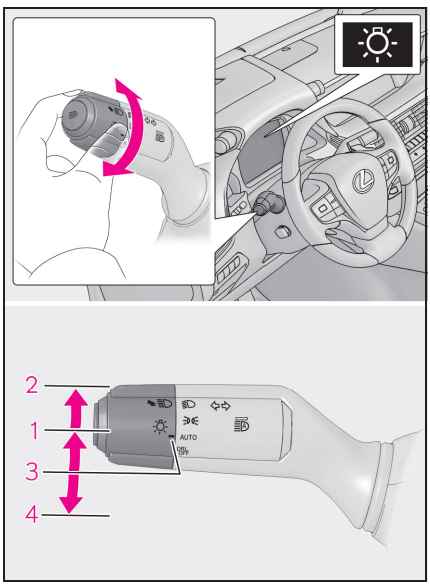
Headlight switch

The headlights can be operated manually or automatically.

Operating instructions

Operating the switch turns on the lights as follows:

▶ For the U.S.A.



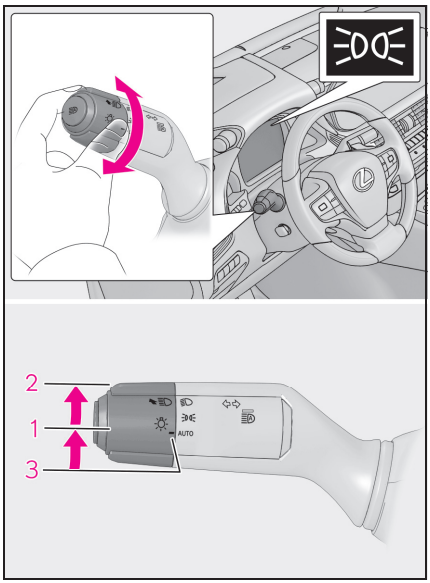
1 The side marker, parking, tail, license plate, instrument panel lights, and daytime running lights (→P.185) turn on.

2 The headlights and all lights listed above (except daytime running lights) turn on.

3 AUTO The headlights, daytime running lights (→P.185) and all the lights listed above turn on and off automatically.

4 DRL OFF Off

▶ For Canada



1 The side marker, parking, tail, license plate, instrument panel lights, and daytime running lights (→P.185) turn on.

2 The headlights and all lights listed above (except daytime running lights) turn on.

3 AUTO The headlights, daytime running lights (→P.185) and all the lights listed above turn on and off automatically.

■ AUTO mode can be used when

The engine switch is in IGNITION ON mode.

■ Daytime running light system

- The daytime running lights illuminate using the same lights as the parking lights

and illuminate brighter than the parking lights.

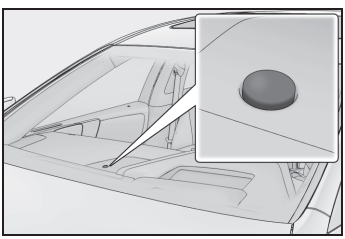
- To make your vehicle more visible to other drivers during daytime driving, the daytime running lights turn on automatically when all of the following conditions are met. (The daytime running lights are not designed for use at night.)
  - The engine is running
  - The parking brake is released
  - The headlight switch is in the or AUTO* position

*: When the surroundings are bright

The daytime running lights remain on after they illuminate, even if the parking brake is set again.

- For the U.S.A.: Daytime running lights can be turned off by operating the switch.
- Compared to turning on the headlights, the daytime running light system offers greater durability and consumes less electricity, so it can help improve fuel economy.

Headlight control sensor



The sensor may not function properly if an object is placed on the sensor, or anything that blocks the sensor is affixed to the windshield.
Doing so interferes with the sensor detecting the level of ambient light and may cause the automatic headlight system to malfunction.

Automatic light off system

- When the headlights are on: The headlights and tail lights turn off 30 seconds after the driver's door is opened and closed if the engine switch is turned to ACCESSORY mode or turned off. (The lights turn off immediately if on the key is pressed after all the doors are closed.)
- When only the tail lights are on: The tail lights turn off automatically if the engine switch is turned to ACCESSORY mode or turned off and the driver's door is opened.

To turn the lights on again, turn the engine switch to IGNITION ON mode, or turn the light switch off once and then back to or .

Light reminder buzzer

A buzzer sounds when the engine switch is turned off or turned to ACCESSORY mode and the driver's door is opened while the lights are turned on.

Automatic headlight leveling system

The level of the headlights is automatically adjusted according to the number of passengers and the loading condition of the vehicle to ensure that the headlights do not interfere with other road users.

Windshield wiper linked headlight illumination

When driving during daytime with the headlight switch turned to AUTO, if the windshield wipers are used, the headlights will turn on automatically after several seconds to help enhance the visibility of your vehicle.

Battery-saving function

In order to prevent the battery of the vehicle from discharging, if the headlights and/or tail lights are on when the engine switch is turned off the battery saving function will operate and automatically turn off all the lights after approximately 20 minutes.
When the engine switch is turned to IGNITION ON mode, the battery-saving function will be disabled.
When any of the following are performed, the battery-saving function is canceled once and then reactivated. All the lights will turn off automatically 20 minutes after the Battery-saving function has been reactivated:

- When the headlight switch is operated

● When a door or the trunk is opened or closed

■ **Welcome light illumination control**

The parking lights and tail lights automatically turn on at night when the doors are unlocked using the entry function or wireless remote control if the light switch is in the AUTO position.

■ **Customization**

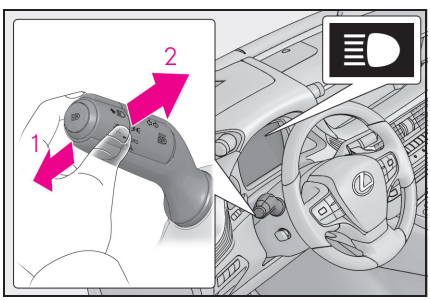
Some functions can be customized. (→P.510)

NOTICE

■ **To prevent battery discharge**

Do not leave the lights on longer than necessary when the engine is not running.

Turning on the high beam headlights



1 With the headlights on, push the lever away from you to turn on the high beams.

Pull the lever toward you to the center position to turn the high beams off.

2 Pull the lever toward you and release it to flash the high beams once.

You can flash the high beams with the headlights on or off.

AFS (Adaptive Front-lighting System)

AFS (Adaptive Front-lighting System) secures excellent visibility at intersections and on curves by automatically adjusting the direction of the light axis of the headlights according to vehicle speed and the degree of the tire's angle as controlled by steering input.

AFS operates at speeds of approximately 6 mph (10 km/h) or higher.

■ **Customization**

Some functions can be customized. (→P.510)

Cornering lights

● When the steering wheel or turn signal lever is operated while the headlights are on (low beam), a cornering light will turn on and light up the direction of movement of the vehicle. The cornering lights are designed to ensure excellent visibility when making a turn at an intersection.

However, when vehicle speed is more than approximately 22 mph (35 km/h), the cornering lights will not turn on.

● When the shift position is in R while the headlights are on (low beam), both cornering lights will turn on. This is designed to enhance visibility when parking.

■ **Cornering lights**

When the cornering lights are on for more than 30 minutes, they will turn off automatically.

Windshield wipers and washer

Operating the lever can switch between automatic operation and manual operation, or can use the washer.

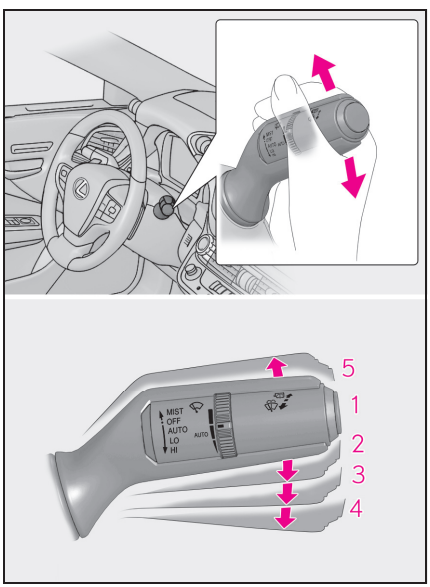
NOTICE

■ **When the windshield is dry**

Do not use the wipers, as they may damage the windshield.

Operating the wiper lever

Operating the lever operates the wipers or washer as follows. When AUTO is selected, the wipers will operate automatically when the sensor detects falling rain. The system automatically adjusts wiper timing in accordance with rain volume and vehicle speed.



1 OFF (U.S.A.) or O (Canada)
Off

2 AUTO Rain-sensing wiper operation

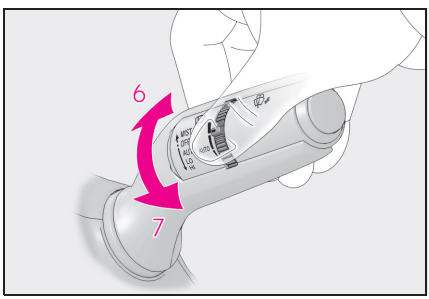
The wipers will operate automatically when the sensor detects falling rain. The system automatically adjusts wiper timing in accordance with rain volume and vehicle speed.

3 LO (U.S.A.) or ▼ (Canada)
Low speed wiper operation

4 HI (U.S.A.) or ▼▼ (Canada)
High speed wiper operation

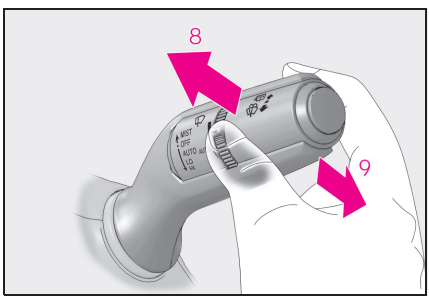
5 MIST (U.S.A.) or △ (Canada)
Temporary operation

When AUTO is selected, the sensor sensitivity can be adjusted by turning the switch ring.



6 Increases the sensitivity

7 Decreases the sensitivity



8 Windshield washer/wiper dual operation

Pulling the lever operates the windshield wipers and washer.
(After operating several times, the wipers operate once more time after a short delay to prevent dripping. However, the dripping prevention does not operate while the vehicle is moving.)

Vehicles with headlight cleaners:
When the engine switch is in IGNITION ON mode and the headlights are on, if the lever is pulled, the headlight cleaners will operate once. After this, the headlight cleaners will operate every 5th time the lever is pulled.

9 * Rear camera washer operation

Pushing the lever operates the rear camera washer and cleans the rear camera and the camera for the Digital Rearview Mirror.

*: Vehicles with Digital Rearview Mirror

■ The windshield wiper and washer can be operated when

The engine switch is in IGNITION ON mode.

■ Effects of vehicle speed on wiper operation

Even when the wipers are not in AUTO mode, vehicle speed affects the time until the drip prevention wiper sweep occurs.

With low speed windshield wiper operation selected, wiper operation will be switched from low speed to intermittent wiper operation only when the vehicle is stationary. (However, when the sensor sensitivity is adjusted to the highest level, the mode cannot be switched.)

■ Operating the windshield wipers and washer using the voice control system *

*: If equipped

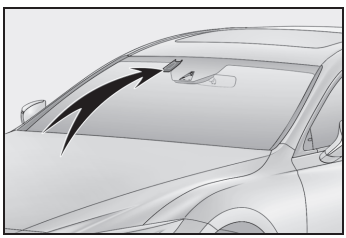
The following operation can be performed using the voice control system.

- Operating the windshield wipers only once
- Operating the windshield washer (it can be performed only when the vehicle is stopped)

For details regarding the voice control system, refer to the "MULTIMEDIA OWNER'S MANUAL".

■ Raindrop sensor

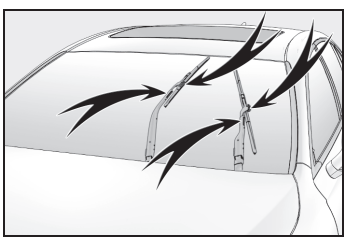
- The raindrop sensor judges the amount of raindrops.
  An optical sensor is adopted. It may not operate properly when sunlight from the rising or setting of the sun intermittently strikes the windshield, or if bugs etc. are present on the windshield.



- If the wiper is turned to AUTO mode while the engine switch is in IGNITION ON mode, the wipers will operate once to show that AUTO mode is activated.
- If the temperature of the raindrop sensor is 185°F (85°C) or higher, or 5°F (-15°C) or lower, automatic operation may not occur. In this case, operate the wipers in any mode other than AUTO mode.

■ If no washer fluid sprays

Check that the washer nozzles are not blocked if there is washer fluid in the washer fluid reservoir.



Front door opening linked windshield wiper stop function

When AUTO is selected and the windshield wipers are operating, if a front door is opened while the vehicle is stopped and the P shift position is selected, operation of the windshield wipers will be stopped to prevent anyone near the vehicle from being sprayed by water from the wipers. When the front door is closed, wiper operation will resume.

When stopping the engine in an emergency while driving

If the windshield wipers are operating when the engine is stopped, the windshield wipers will operate in high speed operation. After the vehicle is stopped, operation will return to normal when the engine switch is turned to IGNITION ON mode, or operation will stop when the driver's door is opened.

Outside rear view mirror defogger activation linked to windshield wiper operation

The outside rear view mirror defoggers automatically turn on when you operate the windshield wipers.
The outside rear view mirror defoggers automatically turn off approximately 15 minutes after the wipers stop.
For details about the outside rear view mirror defoggers: →P.345

WARNING

Caution regarding the use of windshield wipers in AUTO mode

The windshield wipers may operate unexpectedly if the sensor is touched or the windshield is subject to vibration in AUTO mode. Take care that your fingers or anything else do not become caught in the windshield wipers.

Caution regarding the use of washer fluid

When it is cold, do not use the washer fluid until the windshield becomes warm. The fluid may freeze on the windshield and cause low visibility. This may lead to an accident, resulting in death or serious injury.

NOTICE

When there is no washer fluid spray from the nozzle

Damage to the washer fluid pump may be caused if the lever is pulled toward you and held continually.

When a nozzle becomes blocked

In this case, contact your Lexus dealer. Do not try to clear it with a pin or other object. The nozzle will be damaged.

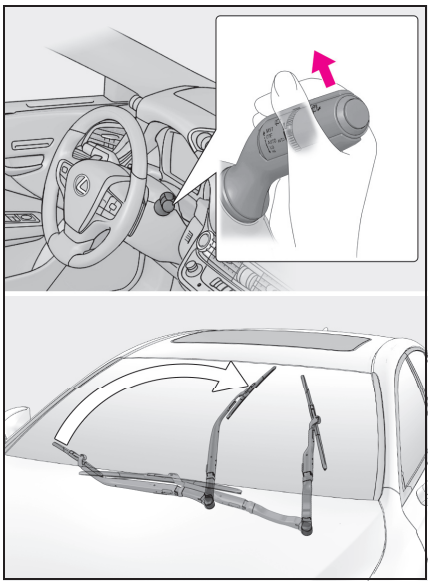
Changing the windshield wiper rest position/Lifting the windshield wipers

When the windshield wipers are not being used, they retract to below the hood. To enable the windshield wipers to be lifted when parking in cold conditions or when replacing a windshield wiper insert, change the rest position of the windshield wipers to the service position using the wiper lever.

Raising the wipers to the service position

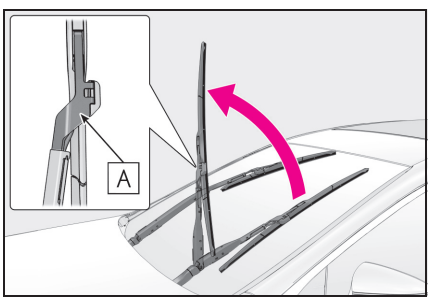
Within approximately 45 seconds of turning the engine switch off, move the wiper lever to the MIST (U.S.A.) or △ (Canada) position and hold it for approximately 2 seconds or more.

The wipers will move to the service position.



■ Lifting the windshield wipers

While holding the hook portion A of the wiper arm, lift the windshield wiper from the windshield.



■ Lowering the windshield wipers to the retracted position

With the windshield wipers placed on the windshield, turn the engine switch to IGNITION ON mode and then move the wiper lever to an operating position. When the wiper switch is turned off, the windshield wipers will stop at the retracted position. Even if the wipers deviate while the engine switch is off, the wipers will return to the normal position.

■ Operating the windshield wipers using the voice control system*

*: If equipped

▶ For the U.S.A.

The windshield wipers can be moved to the service position using the voice control system. (Operation is possible only when the vehicle is stopped with the wiper switch in OFF .)

▶ For Canada

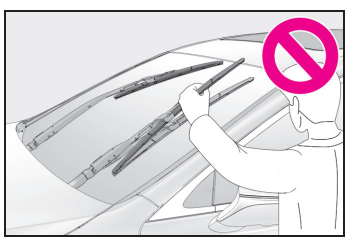
The windshield wipers can be moved to the service position using the voice control system. (Operation is possible only when the vehicle is stopped with the wiper switch in O .)

For details regarding the voice control system, refer to the "MULTIMEDIA OWNER'S MANUAL".

NOTICE

■ When lifting the windshield wipers

- Do not lift the windshield wipers when they are in the retracted position below the hood. Otherwise, they may contact the hood, possibly resulting in damage to a windshield wiper and/or the hood.
- Do not lift a windshield wiper by the wiper blade. Otherwise, the wiper blade may be deformed.



NOTICE

- Do not operate the wiper lever when the windshield wipers are lifted. Otherwise, the windshield wipers may contact the hood, possibly resulting in damage to the windshield wipers and/or hood.

Opening the fuel tank cap

Perform the following steps to open the fuel tank cap:

Before refueling the vehicle

- Close all the doors and windows, and turn the engine switch off.
- Confirm the type of fuel.

■ Fuel types

→P.499

■ Fuel tank opening for unleaded gasoline

To help prevent incorrect fueling, your vehicle has a fuel tank opening that only accommodates the special nozzle on unleaded fuel pumps.

■ If the malfunction indicator lamp illuminates

The malfunction indicator lamp may illuminate erroneously if refueling is performed repeatedly when the fuel tank is nearly full.

⚠ WARNING

■ When refueling the vehicle

Observe the following precautions while refueling the vehicle. Failure to do so may result in death or serious injury.

- After exiting the vehicle and before opening the fuel door, touch an unpainted metal surface to discharge any static electricity. It is important to discharge static electricity before refueling because sparks resulting from static electricity can cause fuel vapors to ignite while refueling.
- Always hold the grips on the fuel tank cap and turn it slowly to remove it. A whooshing sound may be heard when the fuel tank cap is loosened. Wait until the sound cannot be heard before fully removing the cap. In hot weather, pressurized fuel may spray out the filler neck and cause injury.
- Do not allow anyone that has not discharged static electricity from their body to come close to an open fuel tank.
- Do not inhale vaporized fuel. Fuel contains substances that are harmful if inhaled.
- Do not smoke while refueling the vehicle. Doing so may cause the fuel to ignite and cause a fire.
- Do not return to the vehicle or touch any person or object that is statically charged. This may cause static electricity to build up, resulting in a possible ignition hazard.

■ When refueling

Observe the following precautions to prevent fuel overflowing from the fuel tank:

- Securely insert the fuel nozzle into the fuel filler neck.
- Stop filling the tank after the fuel nozzle automatically clicks off.
- Do not top off the fuel tank.

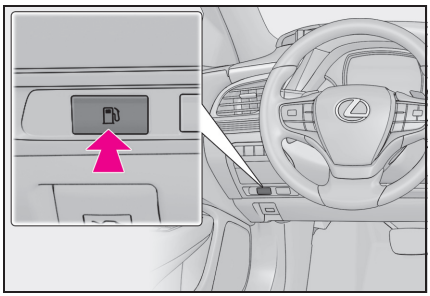
NOTICE

■ Refueling

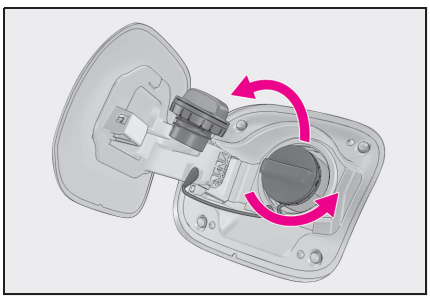
Do not spill fuel during refueling.
Doing so may damage the vehicle, such as causing the emission control system to operate abnormally or damaging fuel system components or the vehicle's painted surface.

Opening the fuel tank cap

1 Press the opener switch.



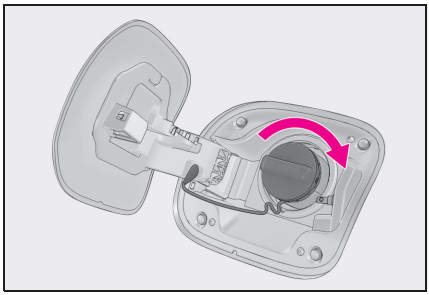
2 Turn the fuel tank cap slowly and remove it, then put it into the holder on the fuel filler door.



■ If the fuel filler door cannot be opened
→P.475

Closing the fuel tank cap

After refueling, turn the fuel tank cap until you hear a click. Once the cap is released, it will turn slightly in the opposite direction.



■ When "Check Fuel Cap" is displayed on the multi-information display

The fuel tank cap may be unfastened or loose. Turn the engine switch off, check the cap and tighten it securely. If the message remains, wait a few seconds and then turn the engine switch off once again.

WARNING

■ When replacing the fuel tank cap

Do not use anything but a genuine Lexus fuel tank cap designed for your vehicle. Doing so may cause a fire or other incident which may result in death or serious injury.

Lexus Safety System + 3 software update*

*: If equipped

It is necessary to enter a connected services contract, provided by Lexus, to use these functions. For details, contact your Lexus dealer.

WARNING

■ For safe use

When the Lexus Safety System + 3 software is updated, the operating methods of functions may change. Using this system without knowing the correct operating methods may lead to an accident resulting in death or serious injury.

- Make sure to read the Digital Owner's Manual which corresponds to the software version of the system, available at the Owner's Manual website, before using this system.

Content of the Lexus Safety System + 3 Owner's Manual

This Owner's Manual contains information for Ver. 2. For the latest information about the controls, use, warnings/precautions, etc. of each function of Lexus Safety System + 3, refer to the Digital Owner's Manual at the Owner's Manual website.

If the software of this system has been updated after initial purchase of the vehicle, before using this system, be sure to read the Owner's Manual which corresponds to the software version of the system.

■ Precautions for use

- Be aware that some functions may temporarily be disabled if a legal or safety related issue occurs.
- If a connected services contract has not been entered or has expired, software updates will not be able to be performed wirelessly.

Checking your vehicle's Lexus Safety System + 3 version

If the software of this system has been updated after initial purchase of the vehicle, to access the appropriate Owner's Manual, it is necessary to check the software version of the system and then visit the Owner's Manual website.

Checking the version using LexusApp

The software version of the system can be checked using LexusApp.

Using your vehicle's Lexus Safety System + 3 version

1 Access the following URL using a computer or smartphone:

▶ For U.S.A. owners

https://drivers.lexus.com/lexusdrivers/resources/owners-manuals/manual?om=om50m11u.ls.2024.2310.cv.vh

▶ For Canadian owners

https://www.lexus.ca/lexus/know-your-lexus/manual?om=om50m11u.ls.2024.2310.cv.vh

2 Select the file which includes the previously checked system version.

Updating the software

If a software update is available, a notification will be displayed by Lexus App. Follow the instructions displayed on the screen.

■ **Software update precautions**

- After a software update has been performed, it will not be possible to revert to a previous version.
- Depending on the communication environment and the content of an update, a software update may take several hours. Although an update will be suspended when the engine switch is turned off, it will resume when the engine switch is changed back to IGNITION ON mode.
- Lexus Safety System + 3 can still be used while a software update is being performed.

■ **What can be checked using the Lexus App**

The following items can be checked or performed.

- Software version, update details, precautions, use methods, etc.
- Software update

Lexus Safety System + 3

The Lexus Safety System + 3 consists of the driving assist systems and contributes to a safe and comfortable driving experience:

WARNING

■ Lexus Safety System + 3

The Lexus Safety System + 3 operates under the assumption that the driver will drive safely, and is designed to help reduce the impact to the occupants in a collision and assist the driver under normal driving conditions.

As there is a limit to the degree of recognition accuracy and control performance that this system can provide, do not overly rely on this system. The driver is solely responsible for paying attention to the vehicle's surroundings and driving safely.

■ For safe use

- Do not overly rely on this system. The driver is solely responsible for paying attention to the vehicle's surroundings and driving safely. This system may not operate in all situations and provided assistance is limited. Over-reliance on this system to drive the vehicle safely may lead to an accident resulting in death or serious injury.
- Do not attempt to test the operation of the system, as it may not operate properly, possibly leading to an accident.
- If attention is necessary while performing driving operations or a system malfunction occurs, a warning message or warning buzzer will be operated. If a warning message is displayed on the display, follow the instructions displayed.
- Depending on external noise, the volume of the audio system, etc. it may be difficult to hear the warning buzzer. Also, depending on the road conditions, it may be difficult to recognize the operation of the system.

■ When it is necessary to disable the system

In the following situations, make sure to disable the system.

Failure to do so may lead to the system not operating properly, possibly leading to an accident resulting in death or serious injury.

- When the vehicle is tilted due to being overloaded or having a flat tire
- When driving at extremely high speeds
- When towing another vehicle
- When the vehicle is being transported by a truck, ship, train, etc.
- When the vehicle is raised on a lift and the tires are allowed to rotate freely
- When inspecting the vehicle using a drum tester such as a chassis dynamometer or speedometer tester, or when using an on vehicle wheel balancer
- When the vehicle is driven in a sporty manner or off-road
- When using an automatic car wash
- When a sensor is misaligned or deformed due to a strong impact being applied to the sensor or the area around the sensor
- When accessories which obstruct a sensor or light are temporarily installed to the vehicle
- When a compact spare tire or tire chains are installed to the vehicle or an emergency tire puncture repair kit has been used

WARNING

- When the tires are excessively worn or the inflation pressure of the tires is low
- When tires other than the manufacturer specified size are installed
- When the vehicle cannot be driven stably, due to a collision, malfunction, etc.

Driving assist systems

■ AHB (Automatic High Beam)

→P.205

■ PCS (Pre-Collision System)

→P.208

■ LTA (Lane Tracing Assist)

→P.218

■ LDA (Lane Departure Alert)

→P.226

■ LCA (Lane Change Assist)*

→P.223

*: If equipped

■ FCTA (Front Cross Traffic Alert)*

→P.237

*: If equipped

■ PDA (Proactive Driving Assist)

→P.232

■ RSA (Road Sign Assist)*

→P.240

*: If equipped

■ Dynamic radar cruise control

→P.242

■ Cruise control

→P.252

■ Emergency Driving Stop System

→P.256

■ Traffic Jam Assist*

→P.258

*: If equipped

■ Driver monitor*

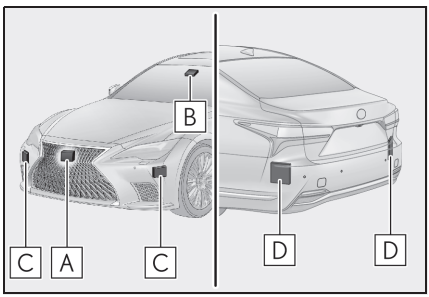
→P.204

*: If equipped

Sensors used by Lexus Safety System + 3

Various sensors are used to obtain the necessary information for system operation.

■ Sensors which detect the surrounding conditions



A Front radar sensor

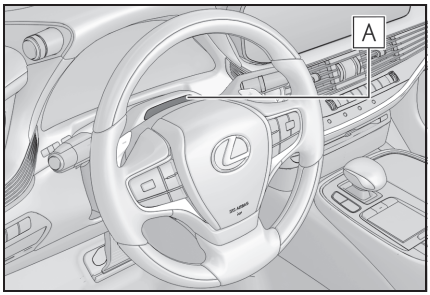
B Front camera

C Front side radar sensors*

D Rear side radar sensors

*: If equipped

Sensors which detect the driver condition



A Driver monitor camera*

*: If equipped

WARNING

To prevent malfunction of the radar sensors

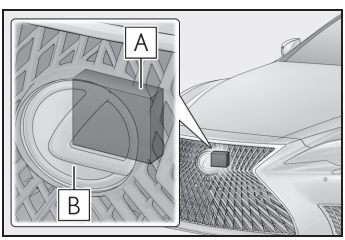
Observe the following precautions.

Failure to do so may lead to a radar sensor not operating properly, possibly leading to an accident resulting in death or serious injury.

- Keep the radar sensors and radar sensor covers clean at all times.

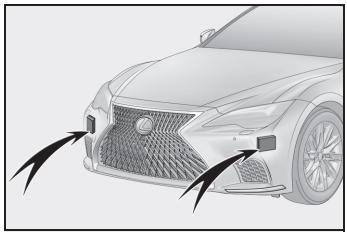
Clean the front of a radar sensor or the front or back of a radar sensor cover if it is dirty or covered with water droplets, snow, etc.

When cleaning the radar sensor and radar sensor cover, use a soft cloth to remove dirt so as to not damage them.



A Radar sensor

B Radar sensor cover



- Vehicles with front side radar sensors: Keep the surrounding area of the front side radar sensors on the front bumper clean at all times.
- Do not attach accessories, stickers (including transparent stickers), aluminum tape, etc. to a radar sensor or radar sensor cover and their surrounding area.
- Do not subject a radar sensor or its surrounding area to impact.
  If a radar sensor, the front grille, or front bumper has been subjected to a impact, have the vehicle inspected by your Lexus dealer.
- Do not disassemble the radar sensors.
- Do not modify or paint the radar sensors or radar sensor cover, or replace them with anything other than Lexus genuine parts.
- In the following situations, recalibration of the radar sensors will be necessary. For details, contact your Lexus dealer.
  - When a radar sensor is removed and installed, or replaced
  - When the front bumper or the front grille has been replaced

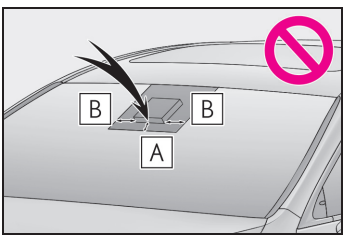
To prevent malfunction of the front camera

Observe the following precautions.

Failure to do so may lead to the front camera not operating properly, possibly leading to an accident resulting in death or serious injury.

WARNING

- Always keep the windshield clean.
  - If the windshield is dirty or covered with an oily film, water droplets, snow, etc., clean the windshield.
  - Even if a glass coating agent is applied to the windshield, it will still be necessary to use the windshield wipers to remove water droplets, etc. from the area of the windshield in front of the front camera.
  - If the inner side of the windshield where the front camera is installed is dirty, contact your Lexus dealer.
- Do not attach stickers (including transparent stickers) or other items to the area of the windshield in front of the front camera (shaded area in the illustration).



A Approximately 1.6 in. (4 cm)

B Approximately 1.6 in. (4 cm)

- If the part of the windshield in front of the front camera is fogged up or covered with condensation or ice, use the windshield defogger to remove the fog, condensation, or ice.
- If water droplets cannot be properly removed from the area of the windshield in front of the front camera by the windshield wipers, replace the wiper insert or wiper blade.
- Do not attach window tint to the windshield.
- Replace the windshield if it is damaged or cracked.
  If the windshield has been replaced, recalibration of the front camera will be necessary. For details, contact your Lexus dealer.
- Do not allow liquids to contact the front camera.
- Do not allow bright lights to shine into the front camera.
- Do not damage the lens of the front camera or allow it to become dirty.
  When cleaning the inside of the windshield, do not allow glass cleaner to contact the lens of the front camera.
  Do not touch the lens of the front camera.
  If the lens of the front camera is dirty or damaged, contact your Lexus dealer.
- Do not subject the front camera to a strong impact.
- Do not change the position or orientation of the front camera or remove it.
- Do not disassemble the front camera.
- Do not modify any parts around the front camera, such as the inside rear view mirror or ceiling.
- Do not attach accessories which may obstruct the front camera to the hood, front grille, or front bumper. For details, contact your Lexus dealer.
- If a surfboard or other long object is to be mounted on the roof, make sure that it will not obstruct the front camera.
- Do not modify or change the headlights and other lights.

WARNING

■ Front camera installation area on the windshield

If the system determines that the windshield may be fogged up, it will automatically operate the heater to defog the part of the windshield around the front camera. When cleaning, etc., be careful not to touch the area around the front camera until the windshield has cooled sufficiently, as touching it may cause burns.

■ Precautions for the driver monitor camera (if equipped)

Observe the following precautions.

Failure to do so may lead to malfunction of the driver monitor camera and the systems not operating properly, possibly leading to an accident resulting in death or serious injury.

- Do not subject the driver monitor camera or its surrounding area to strong impact.
- If subjected to a strong impact, the driver monitor camera may move out of alignment and the driver may no longer be detected correctly. In this case, have the vehicle inspected by your Lexus dealer.
- Do not disassemble or modify the driver monitor camera.
- Do not attach accessories, stickers (including transparent stickers), etc. to the driver monitor camera or its surrounding area.
- Do not allow the driver monitor camera or its surrounding area to get wet.
- Do not cover the driver monitor camera or place anything in front of it.
- Keep the lens of the driver monitor camera free from damage.
- Do not touch the lens of the driver monitor camera or allow it to become dirty.

When there is dirt or fingerprints on the camera lens, clean it with a dry, soft cloth so as to not mark or damage it.

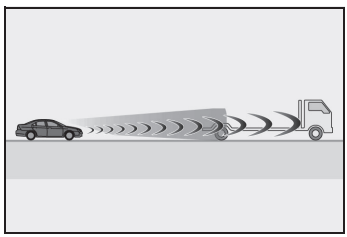
- When cleaning the lens, do not use detergents or organic solvents that may damage plastic.

■ Situations in which the sensors may not operate properly

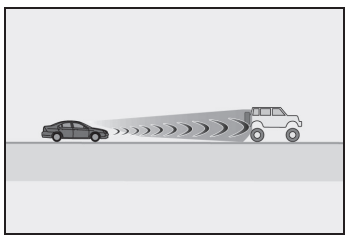
- When the height or inclination of the vehicle has been changed due to modifications
- When the windshield is dirty, fogged up, cracked or damaged
- When the ambient temperature is high or low
- When mud, water, snow, dead insects, foreign matter, etc., is attached to the front of the sensor
- When in inclement weather such as heavy rain, fog, snow, or a sandstorm
- When water, snow, dust, etc. is thrown up in front of the vehicle, or when driving through mist or smoke
- When the headlights are not illuminated while driving in the dark, such as at night or when in a tunnel
- When the lens of a headlight is dirty and illumination is weak
- When the headlights are misaligned
- When a headlight is malfunctioning
- When the headlights of another vehicle, sunlight, or reflected light shines directly into the front camera
- When the brightness of the surrounding area changes suddenly
- When driving near a TV tower, broadcasting station, electric power plant, radar equipped vehicles, etc., or other location where strong radio waves or electrical noise may be present
- When a wiper blade is blocking the front

camera

- When in a location or near objects which strongly reflect radio waves, such as the following:
  - Tunnels
  - Truss bridges
  - Gravel roads
  - Rutted, snow-covered roads
  - Walls
  - Large trucks
  - Manhole covers
  - Guardrail
  - Metal plates
- When near a step or protrusion
- When a detectable vehicle is narrow, such as a small mobility vehicle
- When a detectable vehicle has a small front or rear end, such as an unloaded truck
- When a detectable vehicle has a low front or rear end, such as a low bed trailer



- When a detectable vehicle has extremely high ground clearance



- When a detectable vehicle is carrying a load which protrudes from its cargo area
- When a detectable vehicle has little exposed metal, such as a vehicle which is partially covered with cloth, etc.
- When a detectable vehicle is irregularly shaped, such as a tractor, sidecar, etc.
- When the distance between the vehicle and a detectable vehicle has become extremely short
- When a detectable vehicle is at an angle
- When snow, mud, etc. is attached to a detectable vehicle
- When driving on the following kinds of roads:
  - Roads with sharp curves or winding roads
  - Roads with changes in grade, such as sudden inclines or declines
  - Roads which is sloped to the left or right
  - Roads with deep ruts
  - Roads which are rough and unmaintained
  - Roads which frequently undulate or are bumpy
- When the steering wheel is being operated frequently or suddenly
- When the vehicle is not in a constant position within a lane
- When parts related to this system, the brakes, etc. are cold or extremely hot, wet, etc.
- When the wheels are misaligned
- When driving on slick road surfaces, such as when it is covered with ice, snow, gravel, etc.
- When the course of the vehicle differs from the shape of a curve
- When the vehicle speed is excessively high when entering a curve
- When entering/exiting a parking lot, garage, car elevator, etc.
- When driving in a parking lot
- When driving through an area where there are obstructions which may contact your vehicle, such as tall grass, tree branches, a curtain, etc.
- When driving in strong wind

■ Situations in which the lane may not be detected

- When the lane is extremely wide or narrow
- Immediately after changing lanes or passing through an intersection
- When driving in a temporary lane or lane regulated by construction

- When there are structures, patterns, shadows which are similar to lane lines in the surrounding
- When there are multiple white lines for a lane line
- When the lane lines are not clear or driving on a wet road surface
- When a lane line is on a curb
- When driving on a bright, reflective road surface, such as concrete

■ Situations in which some or all of the functions of the system cannot operate

- When a malfunction is detected in this system or a related system, such as the brakes, steering, etc.
- When the VSC, TRAC, or other safety related system is operating
- When the VSC, TRAC, or other safety related system is off

■ Changes in brake operation sound and pedal response

- When the brakes have been operated, brake operation sounds may be heard and the brake pedal response may change, but this does not indicate a malfunction.
- When the system is operating, the brake pedal may feel stiffer than expected or sink. In either situation the brake pedal can be depressed further. Further depress the brake pedal as necessary.

■ Situations in which the driver monitor may not operate properly (if equipped)

In situations such as the following, the driver monitor camera may not be able to detect the driver's face, and the function may not operate properly.

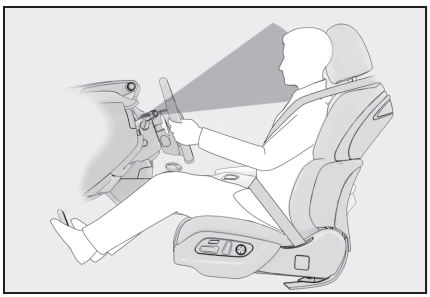
- When the inside of the vehicle is hot, such as after the vehicle has been parked in the sun
- When a very bright light, such as the sun or the headlights of following vehicle, shines onto the driver monitor camera
- When the brightness inside the vehicle changes frequently due to the shadows of surrounding structures, etc.
- When a very bright light, such as the sun or the headlights of an oncoming vehicle, is shining onto the driver's face
- When light, either inside or outside of the vehicle, is being reflected from the lenses of eyeglasses or sunglasses
- When there are multiple faces in the detection range of the driver monitor camera, such as when a front or rear passenger is leaning toward the driver's seat
- When the driver's face is outside of the detection range of the driver monitor camera, such as when leaned forward or when their head is outside of the window
- When the driver monitor camera is being blocked by the steering wheel, a hand holding the steering wheel, an arm, etc.
- When the driver is wearing a hat
- When the driver is wearing an eyepatch
- When the driver is wearing eyeglasses or sunglasses that do not easily transmit infrared rays
- When the driver is wearing contact lenses
- When the driver is wearing a face mask
- When the driver is laughing or their eyes are only slightly open
- When the driver's eyes, nose, mouth, or shape of their face is blocked
- When the driver is wearing makeup which makes it difficult to detect their eyes, nose, mouth, or shape of their face
- When the driver's eyes are blocked by the frame of eyeglasses, sunglasses, hair, etc.
- When there is a device inside the vehicle that radiates near infrared rays, such as a non-genuine driver monitoring system.

Driver monitor*

*: If equipped

Basic functions

During controlled driving, the driver monitor camera detects the position and direction the driver is facing, and whether their eyes are opened or closed. Through this, the system determines if the driver is checking their surroundings and if the driver can perform driving operations.



Warning function

In situations such as the following, a buzzer will sound and a message will be displayed to warn the driver.

- When the system determines that the driver is not paying attention to the road or their eyes are closed
- When the driver's face cannot be detected or the system determines that the driver has poor driving posture

WARNING

For safe use

- The driver monitor is not designed to prevent the driver from driving carelessly or having a poor driving posture. Pay careful attention to the surrounding conditions in order to ensure safe driving.
- The driver monitor cannot reduce drowsiness. If you feel unable to concentrate or drowsy, take a break and sleep as necessary in order to ensure safe driving.

Warning function

These functions may not operate when the vehicle speed is low.

Situations in which the driver monitor may not operate properly

→P.201

Changing Driver monitor settings

The settings of Driver monitor can be changed through customize settings. (→P.510)

AHB (Automatic High Beam)

The Automatic High Beam uses a front camera located on the upper portion of the windshield to detect the brightness of the lights of vehicles ahead, streetlights, etc., and automatically changes the head lights between the high beams and low beams.

WARNING

■ For safe use

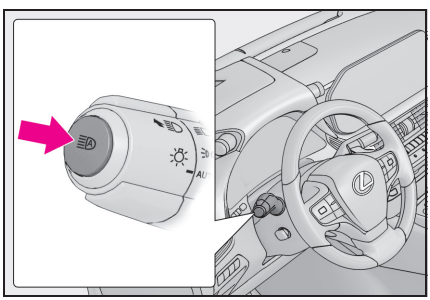
Do not overly rely on the Automatic High Beam. Always drive safely, taking care to observe your surroundings and turning the high beams on or off manually if necessary.

■ To prevent unintentional operation of the Automatic High Beam System

When it is necessary to disable the system: →P.197

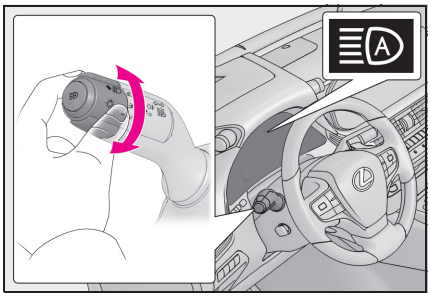
Using the Automatic High Beam system

1 Press the Automatic High Beam switch.



2 Turn the headlight switch to the AUTO or position.

When the headlight switch lever is in the low beam position, the AHB system will be enabled and the AHB indicator will illuminate.



■ Automatic operating conditions of the high beams

- When all of the following conditions are met, the high beams will illuminate automatically:
  - The vehicle speed is approximately 21 mph (34 km/h) or more.
  - The area ahead of the vehicle is dark.
  - There are no vehicles ahead with lights on.
  - There are few streetlights or other lights on the road ahead.
- If any of the following conditions are met, the headlights will change to the low beams:
  - Vehicle speed drops below approximately 17 mph (27 km/h).
  - The area ahead of the vehicle is not dark.
  - There is a vehicle ahead with lights on.
  - There are many streetlights or other lights on the road ahead.

■ Front camera detection

- In the following situations, the high beams may not be automatically changed to the low beams:
  - When a vehicle cuts in front of your vehicle
  - When another vehicle crosses in front of the vehicle
  - When vehicles ahead are repeatedly detected and then hidden due to repeated curves, road dividers or roadside trees
  - When a vehicle ahead approaches from a far lane
  - When a vehicle ahead is far away

- When a vehicle ahead has no lights
- When the lights of a vehicle ahead are dim
- When a vehicle ahead is reflecting strong light, such as own headlights
- Situations in which the sensors may not operate properly: →P.201

● The headlights may change to the low beams if a vehicle ahead that is using fog lights without its headlights turned on is detected.

● House lights, street lights, traffic signals, and illuminated billboards or signs may cause the high beams to change to the low beams, or the low beams to remain on.

● The following may change the timing at which the headlights change to the low beams:

- The brightness of lights of vehicles ahead
- The movement and direction of vehicles ahead
- The distance between the vehicle and a vehicle ahead
- When a vehicle ahead only has lights illuminated on one side
- When a vehicle ahead is a two-wheeled vehicle
- The condition of the road (gradient, curve, condition of the road surface, etc.)
- The number of passengers and amount of luggage

● The headlights may change between the high beams and low beams unexpectedly.

● Bicycles and other small vehicles may not be detected.

● In the following situations, the system may not be able to correctly detect the brightness of the surroundings. This may cause the low beams to remain on or the high beams to flash or dazzle pedestrians or vehicles ahead. In such a case, it is necessary to manually change between the high beams and low beams.

- When there are lights similar to headlights or tail lights in the surrounding area
- When headlights or tail lights of vehicles ahead are turned off, dirty, changing color, or not aimed properly
- When the headlights are repeatedly changing between the high beams and low beams.
- When use of the high beams is inappropriate or when the high beams may be flashing or dazzling pedestrians or other drivers.
- When the vehicle is used in an area in which vehicles travel on the opposite side of the road of the country for which the vehicle was designed, for example using a vehicle designed for right-hand traffic in a left-hand traffic area, or vice versa
- When it is necessary to disable the system: →P.197
- Situations in which the sensors may not operate properly: →P.201

■ **Temporarily reducing front camera sensitivity**

The sensitivity of the front camera can be temporarily reduced.

1 Turn the engine switch off with the following conditions met.

● The headlight switch is in the  or AUTO position.

● The headlight switch lever is in the low beam position.

● The Automatic High Beam switch is on.

2 Turn the engine switch to IGNITION ON mode.

3 Within 60 seconds after performing step 2, push the headlight switch lever to the high beam position then pull it to the original position quickly 10 times, then leave the lever in its original position.

4 If the sensitivity is changed, the Automatic High Beam indicator will blink 3 times.

Turning the high beams on/off manually

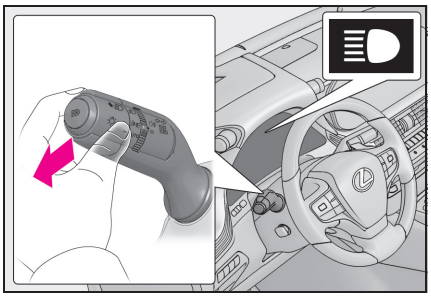
■ **Changing to the high beams**

Push the lever forward.

The AHB indicator will turn off and the high beam indicator will turn on.

Pull the lever to its original position to enable the Automatic High Beam system

again.

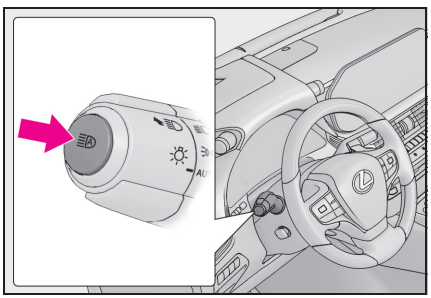


Changing to the low beams

Press the Automatic High Beam switch.

The AHB indicator will turn off.

Press the switch to enable the Automatic High Beam system again.

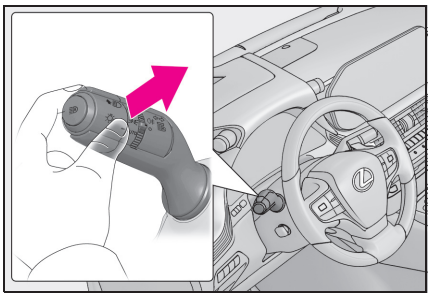


Temporarily changing to the low beams

It is recommended to switch to the low beams when use of the high beams is inappropriate or when the high beams may cause problems or distress to other drivers or pedestrians nearby.

Pull the lever rearward and then return it to its original position.

The high beams will illuminate while the lever is pulled, however, after the lever is returned to its original position, the low beams will remain on for a certain amount of time. After this, the Automatic High Beam system will operate.



PCS (Pre-Collision System)

The pre-collision system uses sensors to detect objects (→P.208) in the path of the vehicle. When the system determines that the possibility of a frontal collision with a detectable object is high, a warning operates to urge the driver to take evasive action and the potential brake pressure is increased to help the driver avoid the collision. If the system determines that the possibility of a collision is extremely high, the brakes are automatically applied to help avoid the collision or help reduce the impact of the collision.

The pre-collision system can be disabled/enabled and the warning timing can be changed. (→P.217)

⚠ WARNING

■ For safe use

- Driving safely is solely the responsibility of the driver. Pay careful attention to the surrounding conditions in order to ensure safe driving.

Never use the pre-collision system in place of normal braking operations. This system cannot help avoid or reduce the impact of a collision in every situation. Over-reliance on this system to drive the vehicle safely may lead to an accident resulting in death or serious injury.

- Although the pre-collision system is designed to help avoid or help reduce the impact of a collision, its effectiveness may change according to various conditions. Therefore, it may not always be able to achieve the same level of performance.
  Read the following items carefully. Do not overly rely on this system and always drive carefully.
- For safe use: →P.197

■ When to disable the pre-collision system

- When it is necessary to disable the system: →P.197

Detectable objects

The system can detect the following as detectable objects. (Detectable objects differ depending on the function.)

- Vehicles
- Bicycles*
- Pedestrians
- Motorcycles*
- Walls

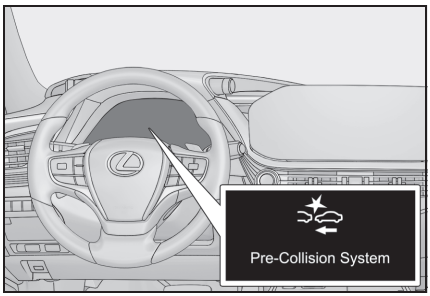
*: Detected as a detectable object only when being ridden.

System functions

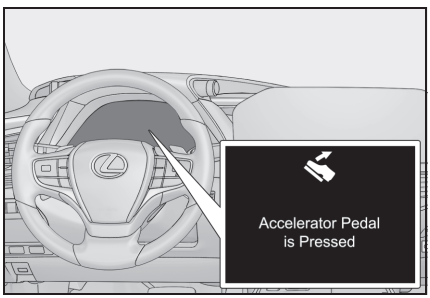
■ Pre-collision warning

When the system determines that the possibility of a collision is high, a buzzer will sound and an icon and warning message will be displayed on the multi-information display to urge the driver to take evasive action.

If the detectable object is a vehicle, moderate braking will be performed with the warning.



If the system determines that the accelerator pedal is strongly depressed, the following icon and message will be displayed on the multi-information display.



Pre-collision brake assist

If the system determines that the possibility of a collision is high and the brake operation by the driver is insufficient, the braking power will be increased.

Pre-collision brake control

If the system determines that the possibility of a collision is extremely high, the brakes are automatically applied to help avoid the collision or reduce the impact of the collision.

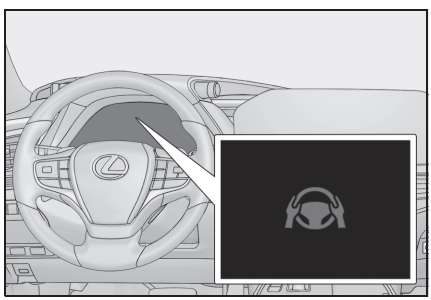
Emergency steering assist

If the system determines that the following conditions are met, assistance will be provided to help enhance vehicle stability and prevent lane departure. During assistance, in addition to the pre-collision warning, the following icon will be displayed on the multi-information display.

- The possibility of a collision is high
- There is sufficient space within the lane to perform evasive steering maneuvers
- The driver is operating the steering wheel

Vehicles with active steering function: The brakes and steering are controlled to help avoid a collision or reduce the impact of a collision, regardless of the evasive steering maneuvers performed by the driver.

During assistance, the pre-collision warning will operate and a message will be displayed to warn the driver.

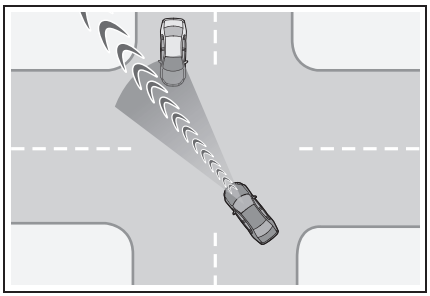


Intersection collision avoidance support (left/right turn)

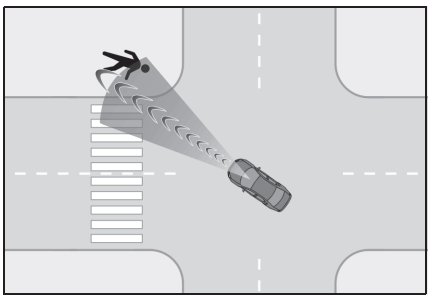
In situations such as the following, if the system determines that the possibility of a collision is high, the pre-collision warning and pre-collision braking will operate.

Depending on the intersection, assistance may not operate correctly.

- When turning left/right at an intersection and crossing the path of an oncoming vehicle



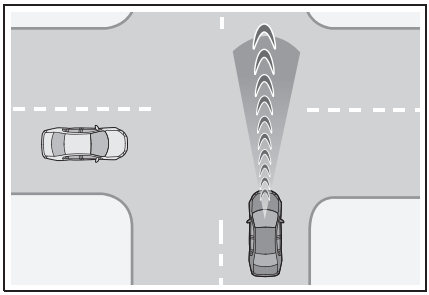
- When turning left/right and a pedestrian or bicycle is detected



Intersection collision avoidance support (crossing vehicles)

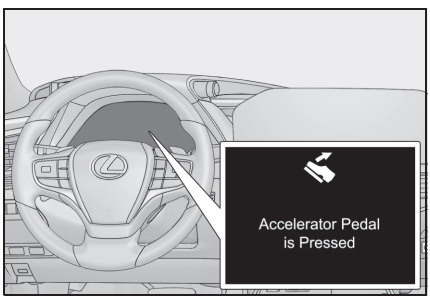
At an intersection, etc., if the system determines that the possibility of a collision with an approaching vehicle or motorcycle is high, the pre-collision warning and pre-collision braking will operate.

Depending on the intersection, assistance may not operate correctly.



Acceleration Suppression at Low Speed

When driving at a low speed, if the accelerator pedal is strongly depressed and the system determines that there is a possibility of a collision, engine output will be restrained or the brakes will be applied weakly to restrict acceleration. During operation, a buzzer will sound and a warning indicator and message will be displayed on the multi-information display.



Suspension control (if equipped)

When the system determines that the possibility of a collision is high, the Adaptive Variable Suspension system (→P.330) controls the damping force of the shock absorbers to help maintain an appropriate vehicle posture.

WARNING

■ Pre-collision braking

- When the pre-collision braking function is operating, a large amount of braking force will be applied.
- The pre-collision braking function is not designed to hold the vehicle stopped. If the vehicle is stopped by pre-collision brake control, the driver should operate the brakes immediately as necessary.
- The pre-collision braking function may not operate if certain operations are performed by the driver. If the accelerator pedal is being depressed strongly or the steering wheel is being turned, the system may determine that the driver is taking evasive action and possibly prevent the pre-collision braking function from operating.
- If the brake pedal is being depressed, the system may determine that the driver is taking evasive action and possibly delay the operation timing of the pre-collision brake control.

■ Acceleration Suppression at Low Speed

If the steering wheel is being turned, the system may determine that the driver is taking evasive action and possibly prevent the Acceleration Suppression at Low Speed function from operating or possibly causing its operation to be canceled.

■ Emergency steering assist

- The emergency steering assist will be canceled when the system determines that lane departure prevention control has completed.
- Depending on operations performed by the driver, emergency steering assist may not operate or operation may be canceled.
  - If the accelerator pedal is depressed strongly, the steering wheel is turned heavily, the brake pedal is depressed, or the turn signal lever is operated, the system may determine that the driver is taking evasive action and the emergency steering assist may not operate.
  - While the emergency steering assist is operating, if the accelerator pedal is depressed strongly, the steering wheel is turned heavily, or the brake pedal is depressed, the system may determine that the driver is taking evasive action and emergency steering assist operation may be canceled.
  - While the emergency steering assist is operating, if the steering wheel is held or turned in the opposite direction of system operation, emergency steering assist operation will be canceled.

■ Operating conditions of each function of the pre-collision system

The pre-collision system is enabled and the system determines that the possibility of a frontal collision with a detected object is high.

However, the system will not operate in the following situations:

- When the vehicle has not been driven a certain amount after a terminal of the battery has been disconnected and reconnected
- When the shift position is in R
- When the VSC OFF indicator is illuminated (only the pre-collision warning function will be operational)

The following are the operational speeds and cancelation conditions of each function:

- Pre-collision warning

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Preceding vehicles, stopped vehicles	Approximately 3 to 110 mph (5 to 180 km/h)	Approximately 3 to 110 mph (5 to 180 km/h)
Oncoming vehicles	Approximately 20 to 110 mph (30 to 180 km/h)	Approximately 50 to 130 mph (80 to 220 km/h)
Bicycles	Approximately 3 to 50 mph (5 to 80 km/h)	Approximately 3 to 50 mph (5 to 80 km/h)
Pedestrians	Approximately 3 to 50 mph (5 to 80 km/h)	Approximately 3 to 50 mph (5 to 80 km/h)
Preceding motorcycles, stopped motorcycles	Approximately 3 to 110 mph (5 to 180 km/h)	Approximately 3 to 50 mph (5 to 80 km/h)
Oncoming motorcycles	Approximately 20 to 110 mph (30 to 180 km/h)	Approximately 20 to 110 mph (30 to 180 km/h)

While the pre-collision warning is operating, if the steering wheel is operated heavily or suddenly, the pre-collision warning may be cancelled.

- Pre-collision brake assist

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Preceding vehicles, stopped vehicles	Approximately 20 to 110 mph (30 to 180 km/h)	Approximately 7 to 110 mph (10 to 180 km/h)
Bicycles	Approximately 20 to 50 mph (30 to 80 km/h)	Approximately 20 to 50 mph (30 to 80 km/h)
Pedestrians	Approximately 20 to 50 mph (30 to 80 km/h)	Approximately 20 to 50 mph (30 to 80 km/h)
Preceding motorcycles, stopped motorcycles	Approximately 20 to 110 mph (30 to 180 km/h)	Approximately 7 to 50 mph (10 to 80 km/h)

- Pre-collision braking

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Preceding vehicles, stopped vehicles	Approximately 3 to 110 mph (5 to 180 km/h)	Approximately 3 to 110 mph (5 to 180 km/h)
Oncoming vehicles	Approximately 20 to 110 mph (30 to 180 km/h)	Approximately 50 to 130 mph (80 to 220 km/h)
Bicycles	Approximately 3 to 50 mph (5 to 80 km/h)	Approximately 3 to 50 mph (5 to 80 km/h)
Pedestrians	Approximately 3 to 50 mph (5 to 80 km/h)	Approximately 3 to 50 mph (5 to 80 km/h)
Preceding motorcycles, stopped motorcycles	Approximately 3 to 110 mph (5 to 180 km/h)	Approximately 3 to 50 mph (5 to 80 km/h)
Oncoming motorcycles	Approximately 20 to 110 mph (30 to 180 km/h)	Approximately 20 to 110 mph (30 to 180 km/h)

If either of the following occur while the pre-collision braking function is operating, it will be canceled:

- The accelerator pedal is strongly depressed
- The steering wheel is operated heavily or suddenly

● Emergency steering assist

The emergency steering assist will not operate when the turn signal lights are flashing.

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Preceding vehicles, stopped vehicles, bicycles, pedestrians, motorcycles	Approximately 25 to 50 mph (40 to 80 km/h) Active steering function: * to 50 mph (* to 80 km/h)	Approximately 25 to 50 mph (40 to 80 km/h) Active steering function: * to 50 mph (* to 80 km/h)

*: Minimum vehicle speed: Vehicle speed at which evasion using pre-collision brake control is difficult

While the emergency steering assist is operating, if any of the following are performed, emergency steering assist operation may be cancelled:

- The accelerator pedal is strongly depressed
- The steering wheel is operated heavily or suddenly
- The brake pedal is depressed

● Intersection collision avoidance support (left/right turn)

The intersection collision avoidance support (for left/right turning vehicles) will not operate when the turn signal lights are not flashing.

Detectable objects	Vehicle speed	Oncoming vehicle speed	Relative speed between your vehicle and object
Oncoming vehicles	Approximately 3 to 25 mph (5 to 40 km/h)	Approximately 3 to 45 mph (5 to 75 km/h)	Approximately 7 to 70 mph (10 to 115 km/h)
Pedestrians	Approximately 3 to 20 mph (5 to 30 km/h)	—	Approximately 3 to 25 mph (5 to 40 km/h)
Bicycles	Approximately 3 to 20 mph (5 to 30 km/h)	—	Approximately 3 to 30 mph (5 to 50 km/h)
Oncoming motorcycles	Approximately 3 to 25 mph (5 to 40 km/h)	Approximately 3 to 45 mph (5 to 75 km/h)	Approximately 7 to 70 mph (10 to 115 km/h)

● Intersection collision avoidance support (crossing vehicles)

▶ Vehicles without front side radars

Detectable objects	Vehicle speed	Crossing vehicle speed	Relative speed between your vehicle and object
Vehicles, Motorcycles (side)	Approximately 3 to 38 mph (5 to 60 km/h)	• Your vehicle speed or less • Approximately 25 mph or less (40 km/h or less)	Approximately 3 to 38 mph (5 to 60 km/h)

▶ Vehicles with front side radars

Detectable objects	Vehicle speed	Crossing vehicle speed	Relative speed between your vehicle and object
Vehicles, Motorcycles (side)	Approximately 3 to 38 mph (5 to 60 km/h)	Approximately 31mph or less (50 km/h or less)	Approximately 3 to 38 mph (5 to 60 km/h)

When driving at approximately 29 mph (40 km/h) or more, this system will only operate when the speed of the other vehicle is approximately 29 mph (40 km/h) or less.

The system operates only when the crossing vehicle speed is same as or less than the vehicle speed.

● Acceleration Suppression at Low Speed

The Acceleration Suppression at Low Speed function will not operate when the turn signal

lights are flashing.

Detectable objects	Vehicle speed	Relative speed between your vehicle and object
Preceding vehicles, stopped vehicles, Pedestrians, Bicycles, Wall	Approximately 0 to 9 mph (0 to 15 km/h)	Approximately 0 to 9 mph (0 to 15 km/h)

While the Acceleration Suppression at Low Speed function is operating, if any of the following are performed, the low speed sudden acceleration suppression function operation will be cancelled:

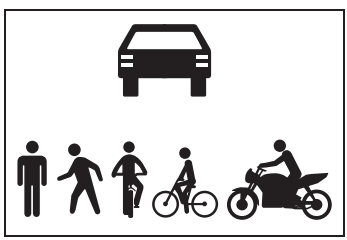
- The accelerator pedal is released.
- The steering wheel is operated heavily or suddenly

■ Detection of detectable objects

Objects are detected based on their size, shape, and movement.

Depending on the ambient brightness, movement, posture and direction of a detectable object, it may not be detected and the system may not operate properly.

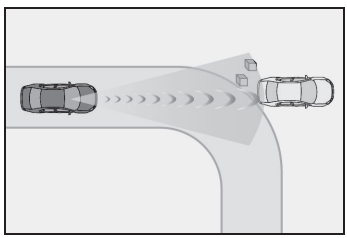
The system detects shapes, such as the following, as detectable objects.



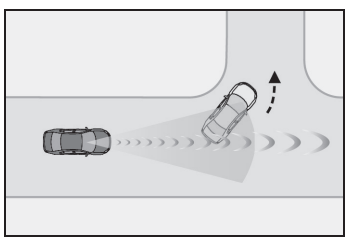
■ Situations in which the system may operate even though the possibility of a collision is not high

● In certain situations, such as the following, the system may determine that the possibility of a collision is high and operate:

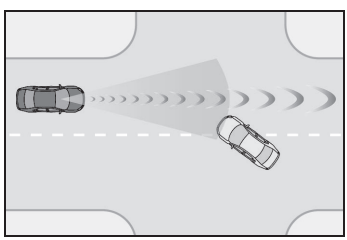
- When passing a detectable object
- When changing lanes while overtaking a detectable object
- When suddenly approaching a detectable object
- When approaching a detectable object or other object on the roadside, such as guardrails, utility poles, trees, walls, etc.
- When there is a detectable object or other object by the roadside at the entrance of a curve



- When there are patterns or a painting ahead of the vehicle that may be mistaken for a detectable object
- When passing a detectable object that is changing lanes or turning left/right

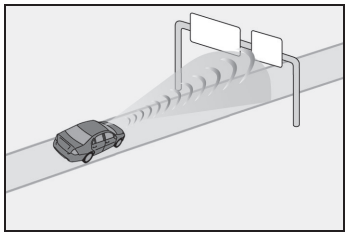


- When passing a detectable object which is stopped to make a left/right turn

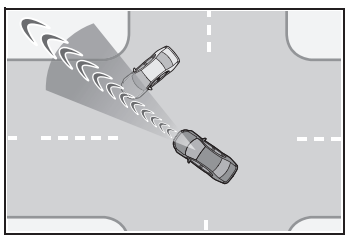


- When a detectable object stops immediately before entering the path of the vehicle

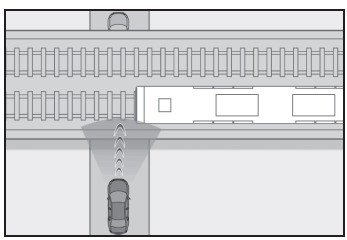
- When passing through a location with a structure above the road (traffic sign, billboard, etc.)



- When approaching an electric toll gate barrier, parking lot barrier, or other barrier that opens and closes
- When turning left/right and an oncoming vehicle, oncoming motorcycle, pedestrian or bicycle crosses in front of the vehicle
- When attempting to turn left/right in front of an oncoming vehicle, oncoming motorcycle, pedestrian or bicycle
- When turning left/right and an oncoming vehicle, oncoming motorcycle, pedestrian or bicycle stops or changes course immediately before entering the path of the vehicle
- When turning left/right and an oncoming vehicle turns left/right in front of the vehicle



- When the steering wheel is operated toward the path of an oncoming vehicle
- When there is an object moving above or under the road

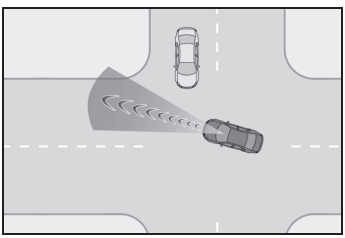


Situations in which the system may not operate properly

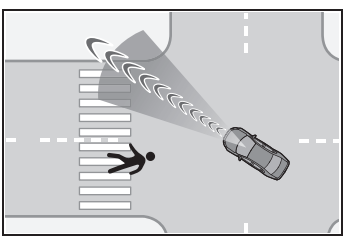
In certain situations, such as the following, a detectable object may not be detected by the front sensors, and the system may not operate properly:

- When a detectable object is approaching your vehicle
- When your vehicle or a detectable object is wandering
- When a detectable object makes an abrupt maneuver (such as sudden swerving, acceleration or deceleration)
- When suddenly approaching a detectable object
- When the detectable object is near a wall, fence, guardrail, manhole cover, steel plate on the road surface, or another vehicle
- When there is a structure above a detectable object
- When part of a detectable object is hidden by another object (large luggage, umbrella, guardrail, etc.)
- When multiple detectable objects are overlapping
- When a bright light, such as the sun, is reflecting off of a detectable object
- When a detectable object is white and looks extremely bright
- When the color or brightness of a detectable object causes it to blend in with its surroundings
- When a detectable object cuts in front of or suddenly emerges in front of your vehicle
- When approaching a vehicle which is diagonal
- If a bicycle is a child sized bicycle, is carrying a large load, is carrying an extra passenger, is carrying a forward leaning rider, or has an unusual shape (bicycles equipped with a child seat, tandem bicycles, etc.)
- If a pedestrian or bicycle is shorter than approximately 3.2 ft. (1 m) or taller than approximately 6.5 ft. (2 m).
- When the silhouette of a pedestrian or bicycle is unclear (such as when they are wearing a raincoat, long skirt, etc.)
- When a pedestrian is bending forward or squatting
- When a pedestrian or bicycle is moving at high speed

- When a pedestrian is pushing a stroller, wheelchair, bicycle or other vehicle
- When a detectable object blends in with the surrounding area, such as when it is dim (at dawn or dusk) or dark (at night or in a tunnel)
- When the vehicle has not been driven for a certain amount of time after the engine was started
- While turning left/right or a few seconds after turning left/right
- While driving around a curve and a few seconds after driving around a curve
- When turning left/right and an oncoming vehicle is driving in a lane 3 or more lanes from the vehicle
- When turning left/right and the direction of the vehicle differs greatly from the direction traffic flows in the oncoming lane



- When turning left/right, a pedestrian or bicycle behind the vehicle comes in front of it as if it overtakes the vehicle



- When at an intersection, the approaching crossing vehicle is long in overall length, such as a large truck, towing trailer, etc.

● In addition to the preceding, in certain situations, such as the following, the emergency steering assist may not operate properly:

- When a detectable object is too close to the vehicle
- When there is insufficient space to perform evasive steering maneuvers or an obstruction exists in the evasion direction
- When there is an oncoming vehicle

● In addition to the preceding, in certain situations, such as the following, walls may not be detected as a target object and the Acceleration Suppression at Low Speed function may not operate properly:

- When scenery behind the wall is visible, such as a glass door, grid fence, etc.
- When the wall is slanted or low
- When the wall is narrow, such as a pole, etc.
- When the wall is made of plants, such as a hedge, etc.
- When the road, etc. is reflected on the wall
- When the vehicle is approaching the wall at an angle

Changing the pre-collision setting

● The pre-collision system can be enabled/disabled through a customize setting. (→P.510)

The system is enabled each time the engine switch is turned to IGNITION ON mode.

● When the system is disabled, the PCS warning light will illuminate and a message will be displayed on the multi-information display.

● The pre-collision setting can be changed on the customize settings. (→P.510)

● Vehicles without active steering function: When the pre-collision warning timing is changed, the emergency steering assist timing will also be changed.
When "Later" is selected, the emergency steering assist will not operate in most cases.

- Vehicles with active steering function: When the pre-collision warning timing is changed, the emergency steering assist timing will also be changed. When "Later" is selected, the emergency steering assist (excluding the active steering function) will not operate in most cases.
- Vehicles with a driver monitor camera: When the system determines that the driver is not facing forward, the pre-collision warning and emergency steering assist will operate at the "Earlier" timing, regardless of the user setting.
- When the dynamic radar cruise control is operating, the pre-collision warning will operate at the "Earlier" timing, regardless of the user setting.
- Vehicles with Traffic Jam Assist: When the Traffic Jam Assist is operating, the pre-collision warning will operate at the "Earlier" timing, regardless of the user setting.

LTA (Lane Tracing Assist)

LTA functions

- When driving on a road with clear lane lines with the dynamic radar cruise control operating, lane lines and preceding and surrounding vehicles are detected using the front camera and radar sensor, and the steering wheel is operated to maintain the vehicle's lane position.

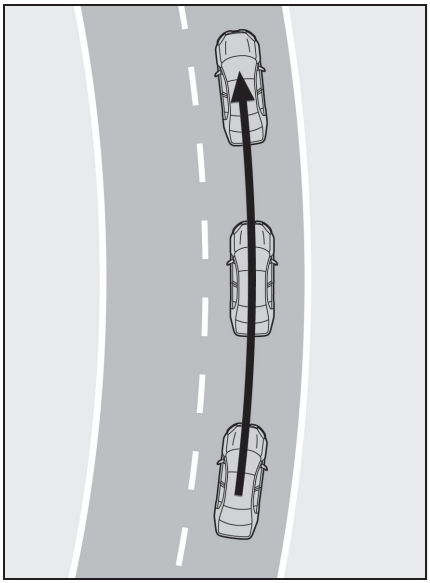
Use the this function only on highways and expressways.

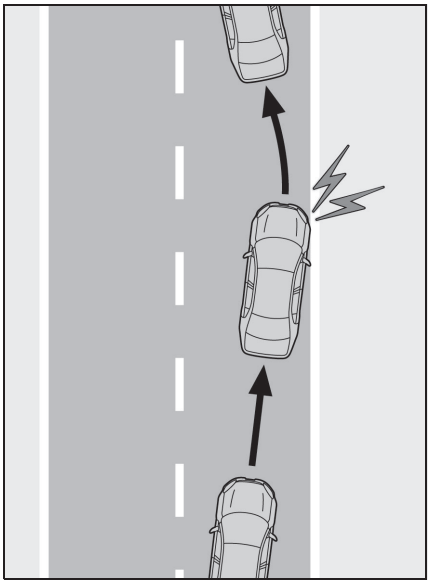
If the dynamic radar cruise control is not operating, the function will not operate.

In situations where the lane lines are difficult to see or are not visible, such as when in a traffic jam, support will be provided using the path of preceding and surrounding vehicles.

If the system determines that the steering wheel has not been operated for a certain amount of time or the steering wheel is not being firmly gripped, the driver will be alerted and this function will be temporarily canceled.

If the steering wheel is firmly gripped, the function will begin operating again.





- When the function is operating, if the vehicle is likely to depart from its lane, the driver will be alerted via a display and buzzer.

When the buzzer sounds, check the area around the vehicle and carefully operate the steering wheel to move the vehicle back to the center of the lane.

WARNING

■ Before using the LTA system

- Do not overly rely on the LTA system. The LTA system is not a system which provides automated assistance in driving and it is not a system which reduces the amount of attention necessary for safe driving. The driver is solely responsible for paying attention to their surroundings and operating the steering wheel as necessary to ensure safety. Also, the driver is responsible for taking adequate breaks when fatigued, such as when driving for a long time.
- Failure to perform appropriate driving operations and pay careful attention may lead to an accident.
- When not using the LTA system, turn it off using the LTA switch.

■ Operating conditions of function

This function is operable when all of the following conditions are met:

- The LTA system detects lane lines or the path of preceding or surrounding vehi-

cles.

- The dynamic radar cruise control is operating.
- The lane width is approximately 10 to 13 ft. (3 to 4 m).
- The turn signal lever is not being operated.
- The vehicle is not being driven around a sharp curve.
- The vehicle is not accelerating or decelerating more than a certain amount.
- The steering wheel is not being turned with a large force.
- The hands off steering wheel warning (→P.220) is not operating.
- The vehicle is being driven in the center of a lane.

■ **Temporary cancelation of functions**

- When the operating conditions are no longer met, a function may be temporarily canceled. However, when the operation conditions are met again, operation of the function will automatically be restored. (→P.219)
- If the operating conditions of a function are no longer met while the function is operating, a buzzer may sound to indicate that the function has been temporarily canceled.
- The steering assist operation of the function can be overridden by the steering wheel operation of the driver.

■ **Lane departure warning function when the LTA is operating**

- Even if the LDA warning method is changed to vibration of the steering wheel, if the vehicle deviates from the lane while the LTA is operating, the warning buzzer will sound to alert the driver.
- If steering wheel operation equivalent to that necessary for a lane change is detected, the system will determine the vehicle is not deviating from the lane and the warning will not operate.

■ **Hands off steering wheel warning operation**

- When the system determines the driver is not holding the steering wheel, a message urging the driver to grip the steering wheel and the icon shown in the illustration will be displayed on the multi-information display to warn the driver. If the system detects that the steering wheel is held, the warning will be canceled. When using the system, make sure to grip the steering wheel firmly, regardless of whether the warning is operating or not.



- If no operations are detected for a certain amount of time, the warning will operate and the function will be temporarily canceled. This warning may also operate if the driver only operates steering wheel a small amount continuously.

■ **Situations in which the hands off steering wheel warning may not operate properly**

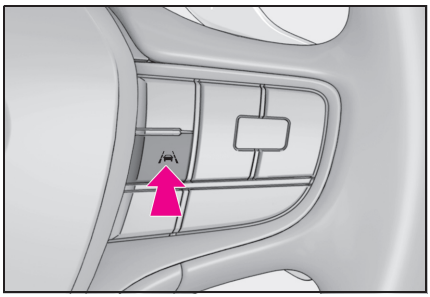
- Depending on the condition of the vehicle,handle control condition and road surface, the warning function may not operate.
- Vehicles with LCA: In the following situations, the system may not be able to detect when the driver's hands are off the steering wheel.
  - When a steering wheel cover is installed
  - When the driver is wearing gloves
  - When foreign matter is attached to the steering wheel
  - When the driver is gripping the wood trim, seam of the leather, spokes, or other part of the steering wheel that does not have sensors
- Vehicles with LCA: In the following situations, the hands off steering wheel warning may not operate and the LTA function may continue operating even though the driver's hands are off the steering wheel:
  - When something other than a hand is contacting the steering wheel
  - When a wide object or arms are held

across the steering wheel

Enabling/disabling the system

The LTA will change between ON/OFF each time the LTA switch is pressed.

When the LTA is ON, the LTA indicator will illuminate.

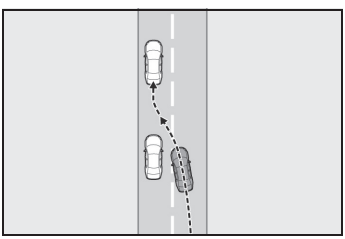


WARNING

■ Situations in which the functions may not operate properly

In the following situations, the functions may not operate properly and the vehicle may depart from its lane. Do not overly rely on these functions. The driver is solely responsible for paying attention to their surroundings and operating the steering wheel as necessary to ensure safety.

- When a preceding or surrounding vehicle changes lanes (Your vehicle may follow the preceding or surrounding vehicle and also change lanes)



- When a preceding or surrounding vehicle is swaying (Your vehicle may sway accordingly and depart from the lane)
- When a preceding or surrounding vehicle departs from a lane (Your vehicle may follow the preceding or surrounding vehicle and also depart from the lane)
- When a preceding or surrounding vehicle is being driven extremely close to the left/right lane line (Your vehicle may follow the preceding or surrounding vehicle accordingly and depart from the lane)
- When there are moving objects or structures in the surrounding area (Depending on the position of the moving object or structure relative to your vehicle, your vehicle may sway)
- When the vehicle is struck by a crosswind or the turbulence of other nearby vehicles
- Situations in which the sensors may not operate properly: →P.201
- Situations in which the lane may not be detected: →P.202
- When it is necessary to disable the system: →P.197

Operation display of steering wheel operation support

The operating state of the LTA system is indicated.

Indicator	Lane display	Steering icon	Situation
 White	 Grey/White	 Grey	LTA is on standby
 Green	 Green	 Green	LTA is operating
 Yellow Flashing	 Yellow Flashing	 Green	The vehicle is departing the lane toward the side which the lane display is flashing

LCA (Lane Change Assist)*

*: If equipped

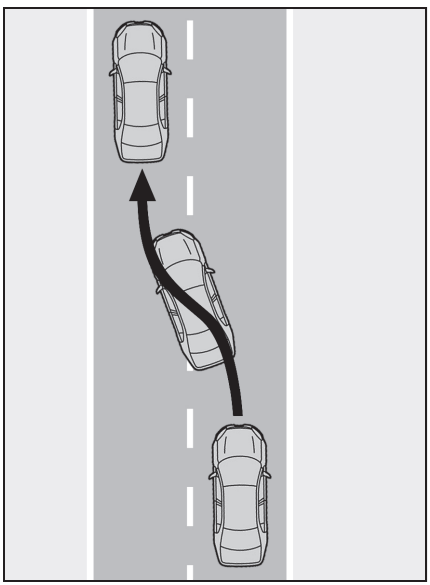
LCA functions

This function is linked to the LTA and provides assistance in performing lane changes through steering wheel operations.

Use the this function only on highways and expressways.

The steering assist operation can be overridden by the steering wheel operation of the driver.

The lane change assist function is not designed to operate when changing lanes at a junction.



WARNING

■ Before using the LCA system

● Do not overly rely on the LCA system.

The LCA system is not a system which provides automated assistance in driving and it is not a system which reduces the need for checking an adjacent lane for other vehicles, approaching vehicles, etc. when changing lanes. The driver is solely responsible for paying attention to their surroundings and operating the steering wheel as necessary to ensure safety.

Also, do not use the LCA to change lanes into which a lane change should not be performed (oncoming lanes, road shoulders, etc.).

● Failure to perform appropriate driving operations and pay careful attention may lead to an accident.

■ Operating conditions of function

This function is operable when all of the following conditions are met:

- The LTA is operating.
- The lane change assist function is enabled by a customize setting.
- The vehicle speed is between approximately 55 and 85 mph (90 and 140 km/h).
- The system detects a broken white line on the side which the lane change is to be performed.
- A vehicle is not detected in the lane toward which the turn signal is operated.
- The steering wheel is not being turned with a large force.
- The hands off steering wheel warning (→P.220) is not operating.

■ Cancelation of functions

In the following situations, operation of the LCA may be canceled with the display and buzzer:

- When the operating conditions (→P.223) are no longer met
- When the system can no longer detect lane lines
- When the turn signal lever is operated to the second position (→P.224)
- When the turn signal lever is operated in the opposite direction of the lane change
- When the system detects operation of the steering wheel, brake pedal or accelerator pedal by the driver.

If the system detects that a vehicle is quickly approaching in the lane toward which the turn signal is operated a buzzer will sound and a message will be displayed to alert the driver. At the same time the steering wheel may be slightly operated to help keep the vehicle away from the approaching vehicle.

■ Hands off steering wheel warning operation

When the system determines the driver is not holding the steering wheel, a message urging the driver to grip the steering wheel and the icon shown in the illustration will be displayed on the multi-information display to warn the driver. If the system detects that the steering wheel is held, the warning will be canceled. When using the system, make sure to grip the steering wheel firmly, regardless of whether the warning is operating or not.



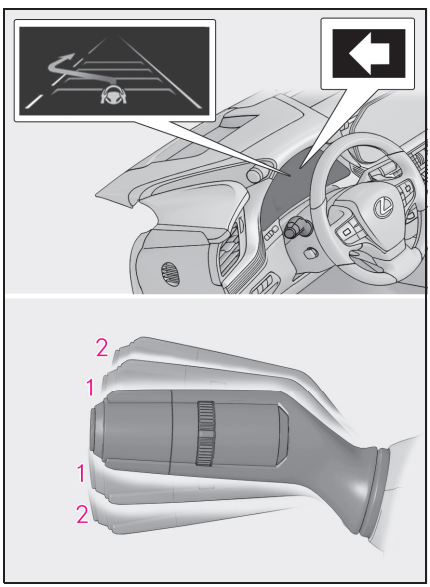
■ Situations in which the hands off steering wheel warning may not operate properly

- Depending on the condition of the vehicle, handle control condition and road surface, the warning function may not operate.
- In the following situations, the system may not be able to detect when the driver's hands are off the steering wheel.
  - When a steering wheel cover is installed
  - When the driver is wearing gloves
  - When foreign matter is attached to the steering wheel
  - When the driver is gripping the wood trim, seam of the leather, spokes, or other part of the steering wheel that does not have sensors
- In the following situations, the hands off steering wheel warning may not operate and the LCA function may continue operating even though the driver's hands are off the steering wheel:
  - When something other than a hand is contacting the steering wheel
  - When a wide object or arms are held across the steering wheel

Operating the LCA

If the turn signal lever is held in the first position, the lane change direction will be displayed and the function will operate.

To change lanes by holding the turn signal lever in the first position without using the LCA, turn the customize setting of the LCA off.



1 First position: LCA is operational
2 Second position: LCA is not operational

WARNING

■ Situations in which the LCA should not be used

- When driving on a one lane road
- When there is no broken white line between the current lane and the lane to be changed to

Enabling/disabling the system

LCA can be enabled/disabled through a customize setting. (→P.510)

Displays and system operation

The operating state of the LCA system is indicated.

LCA display	Steering icon	Condition
 Blue arrow and white line	 Green	LCA is operating
	 Grey	Approaching vehicle detected while LCA is operating
Not displayed	 Grey	Lane line no longer detected while LCA is operating

LDA (Lane Departure Alert)

Basic functions

The LDA system warns the driver if the vehicle may deviate from the current lane or course*, and also can slightly operate the steering wheel to help avoid deviation from the lane or course*.

The front camera is used to detect lane lines or a course*.

*: Boundary between the asphalt and grass, soil, etc., or structures, such as a curb, guardrail, etc.

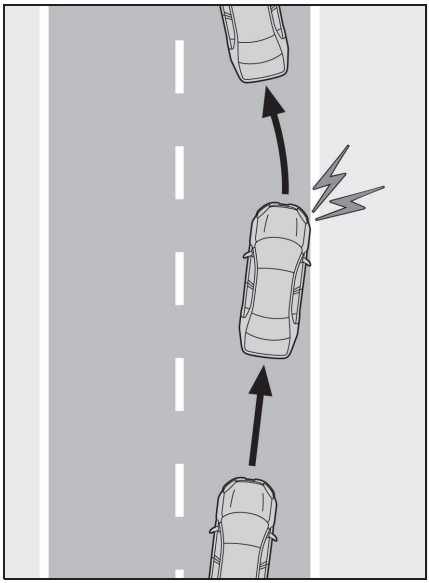
■ Lane departure alert function

When the system determines that the vehicle might depart from its lane or course*, a warning is displayed on a display, and either a warning buzzer will sound or the steering wheel will vibrate to alert the driver.

Check the area around your vehicle and carefully operate the steering wheel to move the vehicle back to the center of the lane or course*.

If the system determines that the vehicle may collide with a vehicle in an adjacent lane, the lane departure alert will operate even if the turn signals are operating.

*: Boundary between the asphalt and grass, soil, etc., or structures, such as a curb, guardrail, etc.



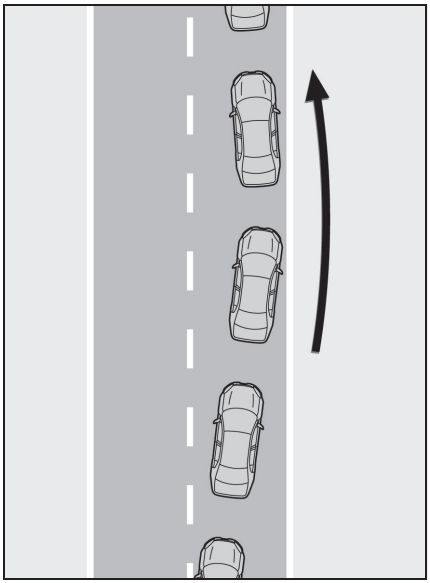
■ Lane departure prevention function

If the system determines that the vehicle is likely to depart from its lane or course*, it provides assistance through steering wheel operations to help avoid deviation from the lane or course*.

If the system determines that the steering wheel has not been operated for a certain amount of time or the steering wheel is not being firmly gripped, a warning message may be displayed and a warning buzzer may sound to alert the driver.

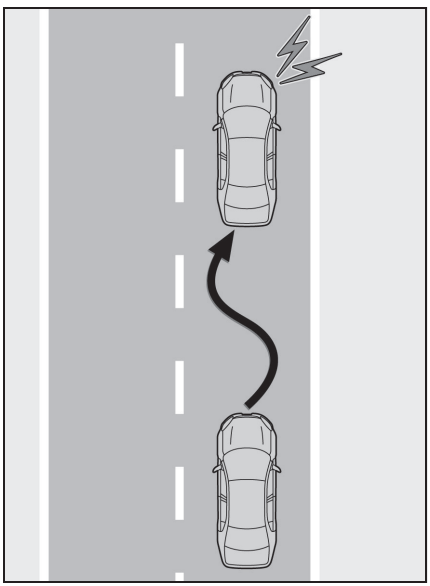
If the system determines that the vehicle may collide with a vehicle in an adjacent lane, the lane departure prevention function will operate even if the turn signals are operating.

*: Boundary between the asphalt and grass, soil, etc., or structures, such as a curb, guardrail, etc.



Break suggestion function

If the vehicle is swaying, a message will be displayed and a buzzer will sound to urge the driver to take a break.



WARNING

Before using the LDA system

- Do not overly rely on the LDA system. The LDA system is not a system which provides automated assistance in driving. However, as it is not a system which reduces the amount of attention necessary for safe driving. The driver is solely responsible for paying attention to their surroundings and operating the steering wheel as necessary to ensure safety. Also, the driver is responsible for taking adequate breaks when fatigued, such as when driving for a long time.
- Failure to perform appropriate driving operations and pay careful attention may lead to an accident.

Operating conditions of each function

Lane departure alert/prevention function

This function is operable when all of the following conditions are met:

- The vehicle speed is approximately 30 mph (50 km/h) or more.

Operation may be possible when the vehicle speed is approximately 25 mph (40 km/h) or more if vehicles, motorcycles, bicycles, or pedestrians are detected near the lane.

- The system recognizes a lane or course*. (When recognized on only one side, the system will operate only for the recognized side.)
- The lane width is approximately 9.8 ft. (3 m) or more.
- The turn signal lever is not being operated.

(Except when a vehicle is detected in the direction that the turn signal lever is operated.)

- The vehicle is not being driven around a sharp curve.
- The vehicle is not accelerating or decelerating more than a certain amount.
- The steering wheel is not being turned sufficiently to perform a lane change.

- When the VSC or TRAC system is not turned off.

*: Boundary between the asphalt and grass, soil, etc., or structures, such as a curb, guardrail, etc.

■ Temporary cancellation of functions

When the operating conditions are no longer met, a function may be temporarily canceled. However, when the operation conditions are met again, operation of the function will automatically be restored. (→P.227)

■ Operation of the lane departure alert function/lane departure prevention function

- Depending on the vehicle speed, road conditions, lane departure angle, etc., operation of the lane departure prevention function may not be felt or the function may not operate.
- Depending on the conditions, the warning buzzer may operate even if vibration is selected through a customize setting.
- If a course* is not clear or straight, the lane departure alert function or lane departure prevention function may not operate.
- The lane departure alert function or lane departure prevention function may not operate if the system judges that the vehicle is intentionally being steered to avoid a pedestrian or parked vehicle.
- It may not be possible for the system to judge if there is danger of a collision with a vehicle in an adjacent lane.
- Vehicles with a driver monitor camera: Depending on the driver condition, the lane departure alert function or lane departure prevention function changes the timing of operation.
- The steering assist operation of the lane departure prevention function can be overridden by the steering wheel operation of the driver.

*: Boundary between the asphalt and grass, soil, etc., or structures, such as a curb, guardrail, etc.

■ Hands off steering wheel warning operation

In the following situations, a message urging the driver to operate the steering wheel and an icon will be displayed and a buzzer will sound to warn the driver. When using the system, make sure to grip the steering wheel firmly, regardless of whether the warning is operating or not.



- When the system determines that the driver is not securely holding the steering wheel, or the steering wheel is not being operated when the steering assist operation of the lane departure prevention function is operating

Except for Puerto Rico: The length of time that the warning buzzer operates will become longer as the frequency of the steering assist operating increases. If the system judges that the steering wheel has been operated, the warning buzzer will stop.

For Puerto Rico: The length of time that the warning buzzer operates will become longer as the frequency of the steering assist operating increases. Even if the system judges that the steering wheel has been operated, the warning buzzer will sound for a certain amount of time.

■ Break suggestion function

This function is operable when all of the following conditions are met:

- The vehicle speed is approximately 40 mph (65 km/h) or more.*1
- The vehicle speed is approximately 32 mph (50 km/h) or more.*2
- The lane width is approximately 9.8 ft. (3 m) or more.

Depending on the condition of the vehicle and road surface, the break suggestion function may not operate.



Press the meter control switch to turn off the message.*1

Unless is pressed, the message of the break suggestion function will remain displayed.*1

*1: For Puerto Rico*3

*2: Except for Puerto Rico*3

*3: The countries and areas for each region listed in the table are current as of October 2023. However, depending on when the vehicle was sold, the countries and areas of each region may be different. Contact your Lexus dealer for details.

Changing LDA settings

- The LDA system can be enabled/disabled through a customize setting. (→P.510)
- The settings of the LDA can be changed on the customize settings. (→P.510)

WARNING

■ Situations in which the system may not operate properly

In the following situations, the system may not operate properly and the vehicle may depart from its lane. Do not overly rely on these functions. The driver is solely responsible for paying attention to their surroundings and operating the steering wheel as necessary to ensure safety.

- When the boundary between the asphalt and grass, soil, etc., or structures, such as a curb, guardrail, etc. is not clear or straight
- When the vehicle is struck by a crosswind or the turbulence of other nearby vehicles
- Situations in which the lane may not be detected: →P.202
- Situations in which the sensors may not operate properly: →P.201
- Situations in which some or all of the functions of the system cannot operate: →P.203
- When it is necessary to disable the system: →P.197

Displays and system operation

The operating state of the lane departure alert function and steering assist operation of the lane departure prevention function are indicated.

▶ Except for Puerto Rico

Indicator	Lane display	Steering icon	Situation
Not illuminated	Not illuminated	Not illuminated	System disabled
 White	 Grey	Not illuminated	Lane lines are not detected by the system
 White	 White	Not illuminated	Lane lines are detected by the system
 Yellow Flashing	 Yellow Flashing	Not illuminated	Lane departure alert function is operating for the side which the lane display is flashing
 Green	 Green	 Green	Lane departure prevention function is operating for the side which the lane display is illuminated
 Yellow Flashing	 Yellow Flashing	 Green	Lane departure alert function/lane departure prevention function is operating for the side which the lane display is flashing

▶ For Puerto Rico

Indicator	Lane display	Steering icon	Situation
 Yellow Illuminated	Not illuminated	Not illuminated	System disabled
Not illuminated	 Grey	Not illuminated	Lane lines are not detected by the system
Not illuminated	 White	Not illuminated	Lane lines are detected by the system

Indicator	Lane display	Steering icon	Situation
 Yellow Flashing	 Yellow Flashing	Not illuminated	Lane departure alert function is operating for the side which the lane display is flashing
 Green	 Green	 Green	Lane departure prevention function is operating for the side which the lane display is illuminated
 Yellow Flashing	 Yellow Flashing	 Green	Lane departure alert function/lane departure prevention function is operating for the side which the lane display is flashing

PDA (Proactive driving assist)

When a detectable object (→P.232) is detected, the proactive driving assist operates the brakes and steering wheel to help prevent the vehicle from approaching too close to the object.

⚠ WARNING

■ For safe use

Driving safely is solely the responsibility of the driver.

- The proactive driving assist is designed to provide some assistance for regular braking and steering operations, as well as helping to prevent the vehicle from approaching too close to a detectable object. However, the scope of this assistance is limited.

The driver should perform brake and steering operations as necessary. Read the following items carefully. Do not overly rely on the proactive driving assist and always drive carefully. (→P.234)

- The proactive driving assist is not a system which reduces the amount of attention necessary for safe driving. Even if the system is operating correctly, the surrounding conditions as recognized by the driver and detected by the system may differ. It is necessary for the driver to pay attention, assess risks, and ensure safety. Over-reliance on this system to drive the vehicle safely may lead to an accident resulting in death or serious injury.
- Proactive driving assist is not a system which allows for inattentive driving and is not a system which assists in poor visibility conditions. The driver is solely responsible for paying attention to their surroundings and driving safely.

■ When turning proactive driving assist off

- Situations in which the sensors may not operate properly: →P.201
- When it is necessary to disable the system: →P.197

System operating conditions and detectable objects

According to the driving conditions, the operation and detectable objects of the proactive driving assist will change as follows.

Function	Conditions	Operation	Detectable objects
Obstacle Anticipation Assist (OAA)	A detectable object is detected crossing the road	Assistance with some brake operations is provided in order to reduce the possibility of a collision.	• Pedestrians • Bicyclists
	A detectable object is detected on the side of the road	Assistance with some brake and steering wheel operations are provided according to the surrounding conditions to help prevent the vehicle from approaching too close to a detected object. Assistance with steering wheel operations is provided within a range that the vehicle will not deviate from its current lane.	• Pedestrians • Bicyclists • Parked vehicles
Deceleration Assist (DA)	A preceding vehicle or an adjacent vehicle cutting in front of the vehicle is detected	The vehicle is gently decelerated so that the vehicle-to-vehicle distance will not be excessively short.	• Preceding vehicles • Motorcycles
	A curve is detected ahead of the vehicle	The vehicle is gently decelerated if the vehicle speed is determined to be too high for the curve ahead.	None
Steering Assist (SA)	Lane is detected	The system anticipates the driver's operation and supports the operation of the steering wheel.	None

■ **Vehicle speeds at which the system can operate**

● Detectable object crossing the road assistance

Approximately 20 to 35 mph (30 to 60 km/h)

● Detectable object on the side of the road assistance

Approximately 20 to 35 mph (30 to 60 km/h)

● Preceding vehicle deceleration assis-

tance

Approximately 15 mph (20 km/h) or more

● Curve deceleration assistance

Approximately 15 mph (20 km/h) or more

● Steering assist within a lane

Approximately 5 to 80 mph (10 to 140 km/h)

■ **System operation will be canceled when**

● In the following situations, system operation will be canceled:
- When the dynamic radar cruise control or cruise control is operating
- When the PCS is off
- Situations in which some or all of the functions of the system cannot operate: →P.203
- When the P, R or N shift position is selected

● In the following situations, the brake operation assist will be canceled:
- Approximately 9 mph (15 km/h) or less
- When a certain vehicle speed has been reached, as judged by the system, according to the surrounding conditions

● In the following situations, system operation may be canceled:
- When the brake control or output restriction control of a driving support system operates

(For example: PCS, drive-start control)
- When the system determines that a detected object has moved away from the vehicle
- When lane lines can no longer be detected
- When the brake pedal has been depressed
- When the accelerator pedal has been depressed
- When the steering wheel has been operated with more than a certain amount of force
- When the turn signal lever is operated to the left/right turn position

WARNING

■ **Situations in which the system may not operate properly**

● Situations in which the lane may not be detected: →P.202

● When a detectable object stops immediately before entering the path of the vehicle

● When passing extremely close to a detectable object behind a guardrail, fence, etc.

● When changing lanes while overtaking a detectable object

● When passing a detectable object that is changing lanes or turning left/right

● When there are objects (guardrails, power poles, trees, walls, fences, poles, traffic cones, mailboxes, etc.) in the surrounding area

● When there are patterns or a painting ahead of the vehicle that may be mistaken for a detectable object

● When passing through a place with a low structure above the road (tunnel with a low ceiling, traffic sign, signboard, etc.)

● When driving on snowy, icy, or rutted roads

● When a detectable object is approaching your vehicle

● When your vehicle or a detectable object is wandering

● When the movement of a detectable object changes (change in direction, sudden acceleration or deceleration, etc.)

● When suddenly approaching a detectable object

● When a preceding vehicle or motorcycle is not directly in front of your vehicle

WARNING

- When there is a structure above a detectable object
- When part of a detectable object is hidden by another object (large luggage, umbrella, guardrail, etc.)
- When multiple detectable objects are overlapping
- When a bright light, such as the sun or headlights of another vehicle, is reflecting off of the detectable object
- When the detectable object is white and looks extremely bright
- When the color or brightness of the detectable object causes it to blend in with its surroundings
- When a detectable object cuts in front of or emerges from beside a vehicle
- When approaching a vehicle ahead which is perpendicular or at an angle to the vehicle, or is facing the vehicle
- If a parked vehicle is perpendicular or at an angle to the vehicle
- When a bicycle is a child sized bicycle, is carrying a large load, is carrying an extra passenger, or has an unusual shape (bicycles equipped with a child seat, tandem bicycles, etc.)
- When a pedestrian or bicyclist is shorter than approximately 3.2 ft. (1 m) or taller than approximately 6.5 ft. (2 m)
- When the silhouette of a pedestrian or bicyclist is unclear (such as when they are wearing a raincoat, long skirt, etc.)
- When a pedestrian or bicyclist is bending forward or squatting
- When a pedestrian or bicyclist is moving at high speed
- When a pedestrian is pushing a stroller, wheelchair, bicycle or other vehicle
- When a detectable object blends in with the surrounding area, such as when it is dim (at dawn or dusk) or dark (at night, in a tunnel, etc.)
- When the lane width is 13.1 ft. (4 m) or more
- When the lane width is 8.2 ft. (2.5 m) m or less
- When the vehicle has not been driven for a certain amount of time after the engine was started
- While turning left or right or a few seconds after turning left or right
- While changing lanes or a few seconds after changing lanes
- When entering a curve, driving around a curve and a few seconds after driving around a curve

Changing proactive driving assist settings

- The proactive driving assist can be enabled/disabled through a customize setting. (→P.510)
- The following settings of the proactive driving assist can be changed through customize settings. (→P.510)

System operation display

Depending on the situation, the following indicators or icons will be displayed.

Some icons cannot be displayed unless the display is changed to the driving safety support function information screen.

Icon	Meaning
	• White: Monitoring for detectable objects • Green: Detectable object crossing the road or detectable object on the side of the road assistance operating
	A pedestrian has been detected as crossing the road or on the side of the road and brake or steering assistance is operating
	A vehicle has been detected on the side of the road and brake or steering operation assistance is being performed
	• Steering operation assistance is being performed to prevent the vehicle from approaching too close to a detectable object on the side of the road • When the steering assist is operating
	Preceding vehicle deceleration assistance is being performed
	Warning to maintain appropriate vehicle-to-vehicle distance
	Curve deceleration assistance is being performed

Hands off steering wheel warning operation

In the following situations, a message urging the driver to grip the steering wheel and the icon shown in the illustration will be displayed on the display to warn the driver. If the system detects that the steering wheel is held, the warning will be canceled. When using the system, make sure to grip the steering wheel firmly, regardless of whether the warning is operating or not.



● When assistance to a detectable object

crossing the road or assistance to a detectable object on the side of the road is performed and the system determines the driver is not holding the steering wheel

If no operations are detected for a certain amount of time, a buzzer will sound, the warning will operate. This warning may also operate if the driver only operates steering wheel a small amount continuously.

■ Warning operation after preceding vehicle deceleration assistance has ended

After preceding vehicle deceleration assistance has ended, if the driver does not operate the brake pedal or accelerator pedal and the vehicle approaches the preceding vehicle, the display will flash and a buzzer will sound to urge the driver to decelerate. If the system determines that the driver is operating the brake pedal or accelerator pedal, the warning will be canceled.



FCTA (Front Cross Traffic Alert)*

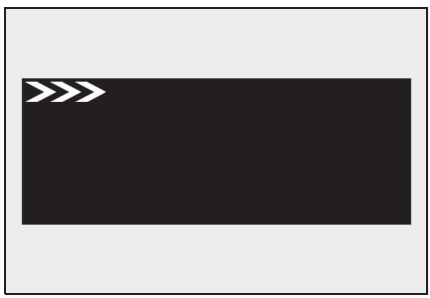
*: If equipped

When approaching an intersection, etc., at a low speed, vehicles approaching from the left and right of the front of the vehicle can be detected and the driver informed of these vehicles.

FCTA system control

- When the system detects a vehicle approaching from the left or right in front of your vehicle when approaching an intersection, a notification will be displayed.

• Head-up display*



*: If equipped

- When the system determines that your vehicle may be about to enter an intersection even though a vehicle is approaching from the left or right in front of your vehicle, a buzzer will sound and a message will be displayed to urge you to depress the brake pedal.

• Multi-information display



WARNING

■ For safe use

Driving safely is solely the responsibility of the driver. Pay careful attention to the surrounding conditions in order to ensure safe driving.

The FCTA system is a supplementary system that informs the driver of vehicles approaching from the left and right of the front of the vehicle.

Over-reliance on this system may lead to an accident resulting in death or serious injury.

The details of the warning display may differ from the actual traffic conditions.

Although the warning display will stop being displayed after a certain amount of time, this does not necessarily indicate that there are no longer any vehicles or pedestrians around your vehicle.

■ FCTA system operating conditions

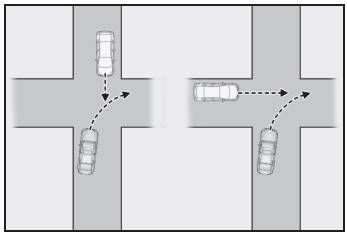
The system will operate when all of the following conditions are met:

- A shift position other than P or R is selected
- The vehicle speed is approximately 10 mph (15 km/h) or less
- A vehicle is approaching from the left or right in front of your vehicle at a speed between approximately 7 to 37 mph (10 to 60 km/h)
- There are no vehicles in front of your vehicle
- The accelerator pedal is not being strongly depressed
- The brake pedal is not being strongly depressed

■ Situations in which the system may operate even though no vehicles are approaching

In certain situations, such as the following, the system may operate even though no vehicles are approaching:

- When approaching objects on the roadside, such as guardrails, traffic signs, utility poles, street lights, trees, tall grass, walls, etc.
- When passing an object on the side of the road, such as a parked vehicle
- When a vehicle or pedestrian is approaching from the left or right in front of your vehicle in the distance
- When a vehicle or pedestrian is moving within a parking spot, etc., next to the lane your vehicle is in
- When a pedestrian or bicyclist is approaching on a sidewalk
- When a vehicle or pedestrian is moving away from your vehicle
- When an approaching vehicle is decelerating or stops
- When an approaching vehicle makes a left/right turn immediately in front of your vehicle
- When a pedestrian is approaching your vehicle
- When an oncoming vehicle makes a right/left turn
- When your vehicle enters an intersection before a vehicle approaching from the left or right in front of your vehicle
- When stopped at traffic light and a vehicle approaches from the left or right in front of your vehicle
- When making a left/right turn in front of an approaching vehicle

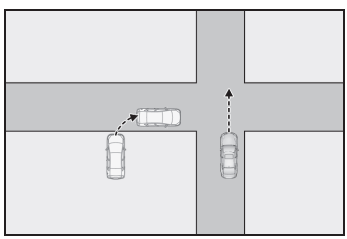


- When an oncoming vehicle approaches and passes
- When being overtaken by another vehicle
- When driving next to another vehicle or a pedestrian
- When a vehicle or pedestrian approaches the side of your vehicle

■ Situations in which the system may not operate properly

In situations such as the following, a vehicle may not be detected by a front side radar sensor and the system may not operate properly:

- If an approaching vehicle moves suddenly (sudden steering, acceleration, deceleration, etc.)



- If a vehicle is approaching from the left or right of the front of your vehicle diagonally
- When a vehicle is approaching from the left or right in front of your vehicle in the distance
- When there is an object between your vehicle and an approaching vehicle
- When several vehicles are approaching with little space between them
- Situations in which the sensors may not operate properly: →P.201
- Situations in which some or all of the functions of the system cannot operate: →P.203

Changing FCTA settings

- The FCTA can be enabled/disabled through a customize setting. (→P.510)
- The following settings of the FCTA can be changed through customize settings. (→P.510)

RSA (Road Sign Assist)*

*: If equipped

The RSA system detects specific road signs using the front camera and/or navigation system (when speed limit information is available) and warns the driver via displays and buzzers.

WARNING

■ For safe use

- Driving safely is solely the responsibility of the driver. Pay careful attention to the surrounding conditions in order to ensure safe driving.
- Do not rely solely upon the RSA. The RSA assists the driver by providing road sign information, but it is not a replacement for the driver's own vision and awareness. Driving safely is solely the responsibility of the driver. Pay careful attention to the surrounding conditions in order to ensure safe driving.

■ Situations in which the RSA should not be used

- When it is necessary to disable the system: →P.197

■ Situations in which the system may not operate properly

- Situations in which the sensors may not operate properly: →P.201

Display Function

- When the front camera detects a sign or information of a sign is available from the navigation system, the sign will be displayed on the display.
- Multiple signs can be displayed.

Depending on the specifications of the vehicle, the number of displayed signs may be limited.

■ Operating conditions of sign display

Signs will be displayed when the following conditions are met:

- The system has detected a sign

In the following situations, a displayed sign may stop being displayed:

- When a new sign has not been detected for a certain distance
- When the system determines that the road being driven on has changed, such as after a left or right turn

■ Situations in which the display function may not operate properly

In the following situations, the RSA system may not operate properly and may not detect signs or may display the incorrect sign. However, this does not indicate a malfunction.

- When a sign is dirty, faded, tilted or bent
- When the contrast of an electronic sign is low
- When all or part of a sign is hidden by a tree, utility pole, etc.
- When a sign is detected by the front camera for a short amount of time
- When the driving state (turning, changing lanes, etc.) is judged incorrectly
- When a sign is immediately after a freeway junction or in an adjacent lane just before merging
- When stickers are attached to the rear of a preceding vehicle
- When a sign similar to a system compatible sign is detected as a system compatible sign
- When a speed limit sign for a frontage road is within detection range of the front camera
- When driving around a roundabout
- When a sign intended for trucks, etc. is detected

- When the navigation system map data is out of date
- When the navigation system cannot be used

In this case, the speed limit signs displayed on the multi-information display and navigation system display may differ.

Notification function

In the following situations, the RSA system will output a warning to notify the driver.

- If the vehicle speed exceeds the speed warning threshold of the speed limit sign displayed on the display, the sign display will be emphasized and a buzzer will sound.
- When the RSA system detects a do not enter sign and determines that the vehicle has entered a no-entry area, the do not enter sign displayed on the display will flash and a buzzer will sound.

Operating conditions of the notification functions

- Excess speed notification function

This function will operate when the following condition is met:
- A speed limit road sign is recognized by the system.

- No entry notification function

This function will operate when all of the following conditions are met:
- More than one no entry road signs are recognized by the system simultaneously.
- The vehicle is passing between no entry road signs recognized by the system.

Types of road signs supported

- The following types of road signs can be displayed.

However, non-standard or recently introduced traffic signs may not be displayed.

	Speed limit
	
	Do Not Enter
	No U-turn
	No Turn On Red
	Stop
	Yield
	Warning

- Depending on the specifications of the vehicle, signs may be displayed overlapping.

Changing RSA settings

The following settings of the RSA can

be changed through customize settings. (→P.510)

Dynamic radar cruise control

This dynamic radar cruise control detects the presence of vehicles ahead, determines the current vehicle-to-vehicle distance, and operates to maintain a suitable distance from the vehicle ahead. The desired vehicle-to-vehicle distance can be set by operating the vehicle-to-vehicle distance switch.

Use the dynamic radar cruise control only on highways and expressways.

WARNING

■ **For safe use**

- Driving safely is solely the responsibility of the driver. Do not overly rely on this system, and pay careful attention to the surrounding conditions in order to ensure safe driving.
- The dynamic radar cruise control provides driving assistance to reduce the driver's burden. However, there are limitations to the assistance provided.

Read the following items carefully. Do not overly rely on this system and always drive carefully.

- Conditions under which the system may not operate correctly: →P.248

- Set the speed appropriately according to the speed limit, traffic flow, road conditions, weather conditions, etc. The driver is responsible for confirming the set speed.

WARNING

- Even if the system is operating correctly, the condition of a preceding vehicle as recognized by the driver and detected by the system may differ. Therefore, it is necessary for the driver to pay attention, assess risks, and ensure safety. Over-reliance on this system to drive the vehicle safely may lead to an accident resulting in death or serious injury.

Precautions for the driving assist systems

Observe the following precautions, as there are limitations to the assistance provided by the system. Over-reliance on this system may lead to an accident resulting in death or serious injury.

- Details of support provided for the driver's vision

The dynamic radar cruise control is only intended to help the driver in determining the distance between the driver's own vehicle and a designated preceding vehicle. It is not a system which allows for careless or inattentive driving, and is not a system which assists in poor visibility conditions.

The driver must pay attention to their surroundings,even when the vehicle stops.

- Details of support provided for the driver's judgement

The dynamic radar cruise control determines whether the distance between the driver's own vehicle and a designated preceding vehicle is within a set range. It is not capable of making any other type of judgement. Therefore, it is absolutely necessary for the driver to remain vigilant and to determine whether or not there is a possibility of danger.

- Details of support provided for the driver's operation

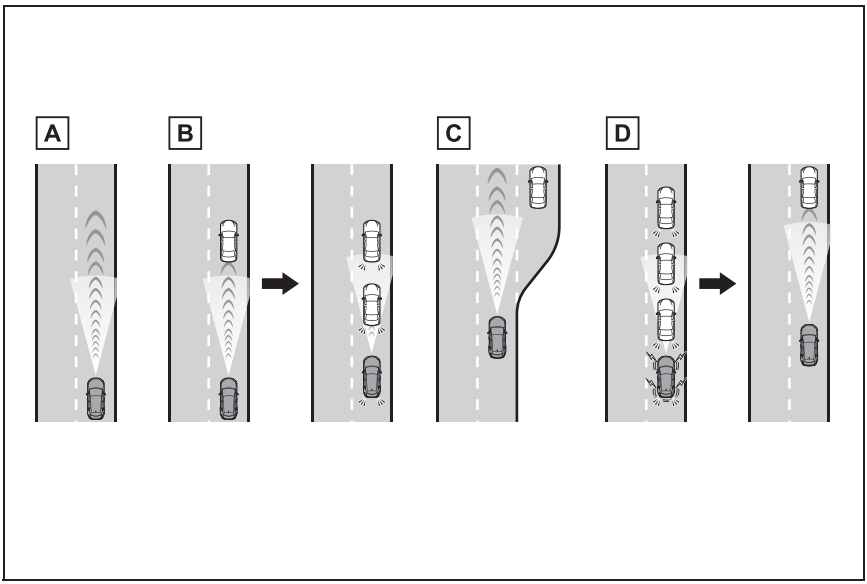
The dynamic radar cruise control does not include functions which will prevent or avoid collisions with vehicles ahead of your vehicle. Therefore, if there is ever any possibility of danger, the driver must take immediate and direct control of the vehicle and act appropriately in order to ensure safety.

Situations in which the dynamic radar cruise control should not be used

Do not use the dynamic radar cruise control in the following situations. As the system will not be able to provide appropriate control, using it may lead to an accident resulting in death or serious injury.

- Roads where there are pedestrians, cyclists, etc.
- When driving on a highway or expressway entrance or exit
- When the approach warning sounds frequently
- Situations in which the sensors may not operate properly: →P.201
- Situations in which the lane may not be detected: →P.197

Basic functions



A Constant speed cruising:
When there are no vehicles ahead

The vehicle drives at the speed set by the driver.

If the set vehicle speed is exceeded while driving down a hill, the set vehicle speed display will blink and a buzzer will sound.

B Deceleration and follow-up cruising:
When a preceding vehicle driving slower than the set vehicle speed is detected

When a vehicle is detected driving ahead of your vehicle, the vehicle automatically decelerates and if a greater reduction in vehicle speed is necessary, the brakes are applied (the stop lights will come on at this time). The vehicle is controlled to maintain the vehicle-to-vehicle distance set by the driver, in accordance with changes in the speed of the preceding vehicle. If vehicle deceleration is not sufficient and the vehicle approaches the vehicle ahead, the approach warning will sound.

C Acceleration:
When there are no longer any preceding vehicles driving slower than the set vehicle speed

The vehicle accelerates until the set vehicle speed is reached and then resumes constant speed cruising.

D Starting off:

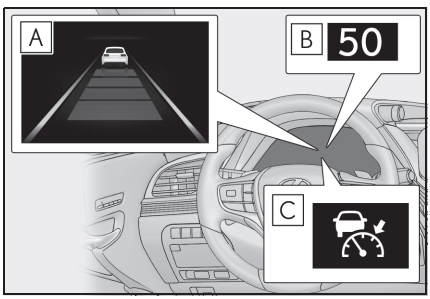
If a preceding vehicle stops, the vehicle will also stop (controlled stop). After the preceding vehicle starts off, pressing the "RES" switch or depressing the accelerator pedal will resume

follow-up cruising (start off operation). If a start off operation is not performed, the controlled stop will continue.

Vehicles with Traffic Jam Assist: While driving on a highway or expressway, if a preceding vehicle stops, your vehicle will stop accordingly. On some highways and expressways, if the system determines that the preceding vehicle starts off within approximately 3 minutes of stopping, a buzzer will sound and a message will be displayed on the multi-information display to notify the driver, and your vehicle will start off accordingly following the preceding vehicle. (Extended resume time)

System components

Meter display

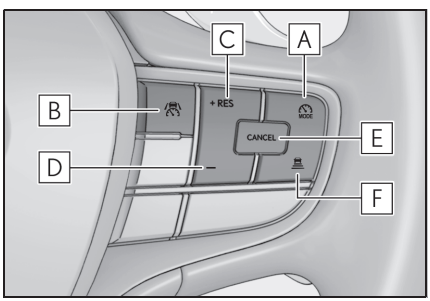


A Multi-information display

B Set vehicle speed

C Indicators

Switches



A Driving assist mode select switch

B Driving assist switch

C "+" switch/"RES" switch

D "-" switch

E Cancel switch

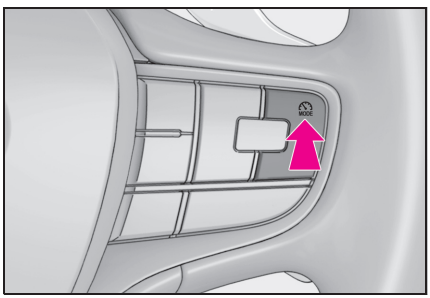
F Vehicle-to-vehicle distance switch

Using the dynamic radar cruise control

Setting the vehicle speed

1 Press the driving assist mode select switch to select dynamic radar cruise control.

The dynamic radar cruise control indicator will illuminate.

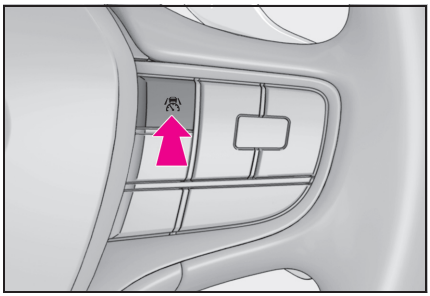


2 Using the accelerator pedal, accelerate or decelerate to the desired vehicle speed (approximately 20 mph [30 km/h] or more), and press the driving assist switch to set the set vehicle speed.

The set vehicle speed will be displayed on the multi-information display.

The vehicle speed at the moment the switch is released will be the set vehicle

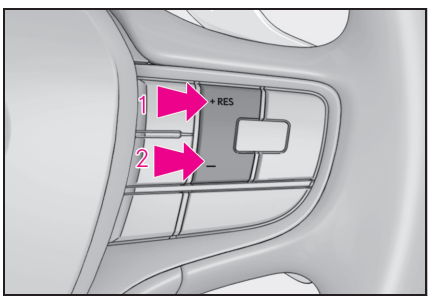
speed.



Adjusting the set vehicle speed

● Adjusting the set vehicle speed using the switches

To change the set vehicle speed, press the "+" switch or "-" switch until the desired speed is displayed.



1 Increase set vehicle speed

2 Decrease set vehicle speed

Short press adjustment: Press the switch

Long press adjustment: Press and hold the switch until the desired set vehicle speed is reached.

The set vehicle speed will increase or decrease as follows:

▶ Except for Canada

Short press adjustment: Increases or decreases by 1 mph (1.6 km/h) each time the switch is pressed

Long press adjustment: Increases or decreases in 1 mph (1.6 km/h) increments continuously while the switch is pressed and held

▶ For Canada

Short press adjustment: By 0.6 mph (1 km/h) or 1 mph (1.6 km/h) each time the switch is pressed

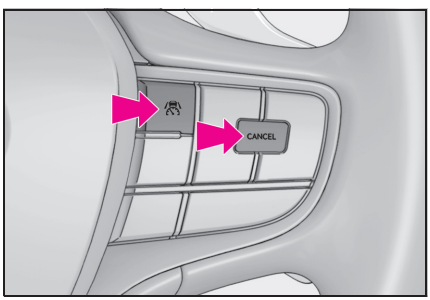
Long press adjustment: Increases or decreases in 3.1 mph (5 km/h) or 5 mph (8 km/h) increments continuously while the switch is pressed and held

● Increasing the set vehicle speed using the accelerator pedal

1 Depress the accelerator pedal to accelerate the vehicle to the desired vehicle speed.

2 Press the "+" switch.

Canceling/resuming control



1 Press the cancel switch or driving assist switch to cancel control.

Control will also be canceled if the brake pedal is depressed.

(If the vehicle has been stopped by system control, depressing the brake pedal will not cancel control.)

2 Press the "RES" switch to resume control.

Changing the vehicle-to-vehicle distance

Each time the switch is pressed, the vehicle-to-vehicle distance setting will change as follows:

If a preceding vehicle is detected, the preceding vehicle mark will be displayed.

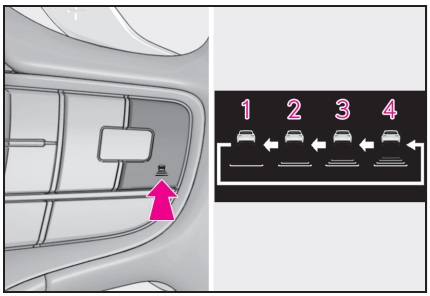


Illustration Number	Vehicle-to-vehicle distance	Approximate Distance (Vehicle Speed: 60 mph [100 km/h])
1	Short	Approximately 85 ft. (25 m)
2	Medium	Approximately 100 ft. (30 m)
3	Long	Approximately 145 ft. (45 m)
4	Extra long	Approximately 200 ft. (60 m)

The actual vehicle-to-vehicle distance varies in accordance with the vehicle speed. Also, when the vehicle is stopped by system control, it will be stopped at a certain distance from the preceding vehicle, depending on the situation, regardless of the setting.

Operating conditions

- The shift position is in D.
- The desired set speed can be set when the vehicle speed is approximately 20 mph (30 km/h) or more.
- If the vehicle speed is set while driving at below approximately 20 mph (30 km/h), the set vehicle speed will be approximately 20 mph (30 km/h).
- If the vehicle speed is set while driving at a speed that exceeds the system's upper limit, the set vehicle speed will be the system's upper limit.

Accelerating after setting the vehicle speed

As with normal driving, acceleration can be performed by depressing the accelerator pedal. After accelerating, the vehicle will return to the set vehicle speed. However, while in vehicle-to-vehicle distance control mode, the vehicle speed may decrease to below the set vehicle speed in order to maintain the distance from the preceding vehicle.

When the vehicle is stopped by system control during follow-up cruising

- When the "RES" switch is pressed while the vehicle is stopped by system control, if the preceding vehicle starts off within approximately 3 seconds, follow-up cruising will resume.
- If the preceding vehicle starts off within approximately 3 seconds of the vehicle being stopped by system control, follow-up cruising will resume.

Automatic cancellation of vehicle-to-vehicle distance control mode

In the following situations, vehicle-to-vehicle distance control mode will be canceled automatically:

- When the brake control or output restriction control of a driving support system operates
  (For example: Pre-Collision System, drive-start control)
- When the parking brake has been operated
- When the vehicle is stopped by system control on a steep incline
- When any of the following are detected while the vehicle is stopped by system control:

- The driver's seat belt is unfastened
- The driver's door is opened
- Approximately 3 minutes have elapsed since the vehicle was stopped

The parking brake may be actived automatically.

● Situations in which some or all of the functions of the system cannot operate: →P.203

■ **Dynamic radar cruise control system warning messages and buzzers**

For safe use: →P.197

■ **Preceding vehicles that the sensor may not detect correctly**

In the following situations, depending on the conditions, if the system cannot provide sufficient deceleration or acceleration is necessary, operate the brake pedal or accelerator pedal.

As the sensor may not be able to correctly detect these types of vehicles, the approach warning (→P.248) may not operate.

● When a vehicle cuts in front of your vehicle or changes lanes away from your vehicle extremely slowly or quickly

● When changing lanes

● When a preceding vehicle is driving at a low speed

● When a vehicle is stopped in the same lane as the vehicle

● When a motorcycle is traveling in the same lane as the vehicle

■ **Conditions under which the system may not operate correctly**

In the following situations, operate the brake pedal (or accelerator pedal, depending on the situation) as necessary.

As the sensor may not be able to correctly detect a vehicle, the system may not operate properly.

● When a preceding vehicle brakes suddenly

● When changing lanes at low speeds, such as in a traffic jam

■ **Conditions for extended resume time (vehicles with Traffic Jam Assist)**

Extended resume time is activated when all of the following conditions are satisfied:

● The vehicle is driving on a vehicle-only road, such as an expressway.

● There is a preceding vehicle and the system is able to detect it.

● No vehicle interruptions occur.

● The preceding vehicle has not been replaced.

● Clearance sonar and FCTA are not detecting the object in front of you.

● The driver monitor judges that the driver is looking forward.

● The steering wheel has not been operated.

● The brake pedal has not been operated.

Approach warning

In situations where the vehicle approaches a preceding vehicle and the system cannot provide sufficient deceleration, such as if a vehicle cuts in front of the vehicle, a warning display will flash and a buzzer will sound to alert the driver. Depress the brake pedal to ensure appropriate vehicle-to-vehicle distance.

■ **Warnings may not occur when**

In the following situations, the warning may not operate even though the vehicle-to-vehicle distance is short.

- When the preceding vehicle is traveling at the same speed or faster than your vehicle
- When the preceding vehicle is traveling at an extremely low speed
- Immediately after the vehicle speed has been set

- When the accelerator pedal is depressed

Curve speed reduction function

When a curve is detected, the vehicle speed will begin being reduced. When the curve ends, the vehicle speed reduction will end.

Depending on the situation, the vehicle speed will then return to the set vehicle speed.

In situations where vehicle-to-vehicle distance control needs to operate, such as when a preceding vehicle cuts in front of your vehicle, the curve speed reduction function will be canceled.



Situations in which the curve speed reduction function may not operate

In situations such as the following, the curve speed reduction function may not operate:

- When the vehicle is being driven around a gentle curve
- When the accelerator pedal is being depressed
- When the vehicle is being driven around an extremely short curve

Driver Monitor support function (if equipped)

While a warning of the driver monitor is being displayed, the vehicle acceleration will be restrained.

When the warning of the driver monitor disappears, the restrained acceleration control will end.

Support for lane change

If your vehicle is being driven at approximately 50 mph (80 km/h) or more and a lane change to the passing lane is performed, when the turn signal lever is operated and the lane is changed, the vehicle will accelerate up to the set speed to assist in overtaking.

The system's recognition of which lane is the passing lane may be based solely on the location of the steering wheel in the vehicle (left-hand drive/right-hand drive). If the vehicle is driven in a location where the passing lane is on the opposite side of that where the vehicle was originally sold, the vehicle may accelerate when the turn signal lever is operated away from the passing lane. (e.g. The vehicle was manufactured for a right-hand traffic location, but is being driven in a left-hand traffic location. The vehicle may accelerate when the turn signal lever is operated to the right.)

If your vehicle is being driven at approximately 50 mph (80 km/h) or more and the lane is changed to that with a vehicle traveling slower than your vehicle, when the turn signal lever is operated the vehicle will gradually decelerate to assist in changing lanes.

Changing Dynamic radar cruise control settings

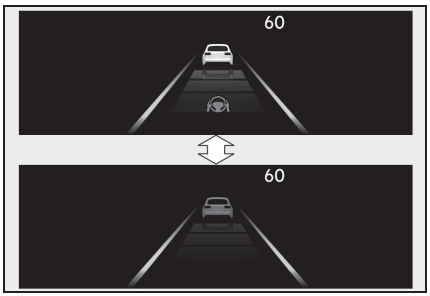
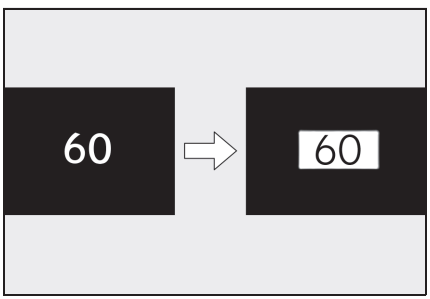
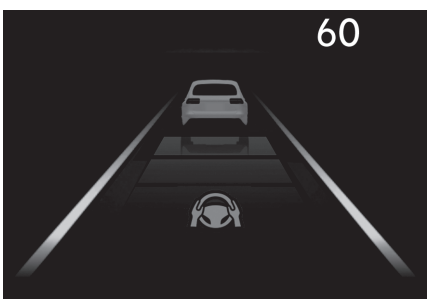
- The settings of Dynamic radar

cruise control can be changed through customize settings. (→P.510)

Display and system operation state

The operating state of Dynamic radar cruise control is indicated.

Indicator	Multi-information display		Situation
White		Vehicle-to-vehicle distance setting: Grey	Dynamic radar cruise control being OFF
Green		Vehicle-to-vehicle distance setting: Blue Set vehicle speed: Green	Constant speed cruising
Green		Vehicle-to-vehicle distance setting: Blue Set vehicle speed: Green Preceding vehicle: White	Follow-up cruising

Indicator	Multi-information display		Situation
Green		Vehicle-to-vehicle distance setting: Orange flashing Set vehicle speed: Green Preceding vehicle: Orange flashing	Approach warning
Green		Vehicle-to-vehicle distance setting: Grey Set vehicle speed: White Preceding vehicle: Grey	Accelerating with the accelerator pedal
Green		Set vehicle speed: Green in reverse display	Set vehicle speed being exceeded
Green		Vehicle-to-vehicle distance setting: Gray Set vehicle speed: White Preceding vehicle: Gray	Vehicle in controlled stop

Cruise control

The vehicle can be driven at a set speed even if the accelerator pedal is not depressed.

Use the cruise control only on highways and expressways.

WARNING

■ For safe use

- Driving safely is solely the responsibility of the driver. Therefore, do not overly rely on this system. The driver is solely responsible for paying attention to the vehicle's surroundings and driving safely.
- Set the speed appropriately according to the speed limit, traffic flow, road conditions, weather conditions, etc. The driver is responsible for confirming the set speed.

■ Situations in which cruise control should not be used

Do not use the cruise control in the following situations. As the system will not be able to provide appropriate control, using it may lead to an accident resulting in death or serious injury.

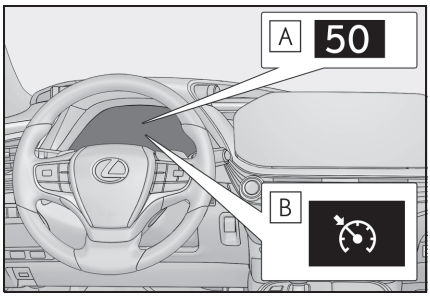
- On roads with sharp bends
- On winding roads
- On slippery roads, such as those covered with rain, ice or snow
- On steep downhills, or where there are sudden changes between sharp up and down gradients

Vehicle speed may exceed the set speed when driving down a steep hill.

- When it is necessary to disable the system: →P.197

System Components

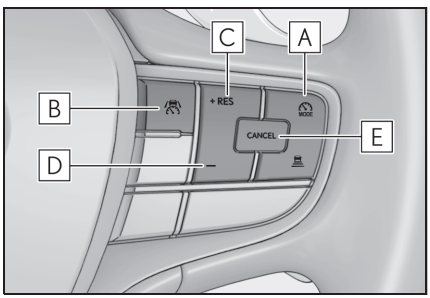
■ Meter display



A Set vehicle speed

B Cruise control indicator

■ Switches



A Driving assist mode select switch

B Driving assist switch

C "+" switch/"RES" switch

D "-" switch

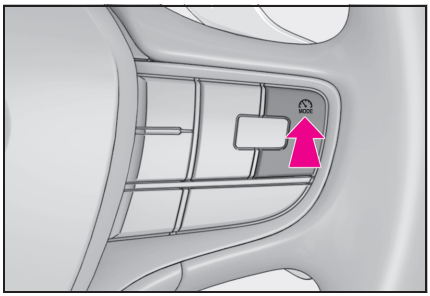
E Cancel switch

Using the cruise control

Setting the vehicle speed

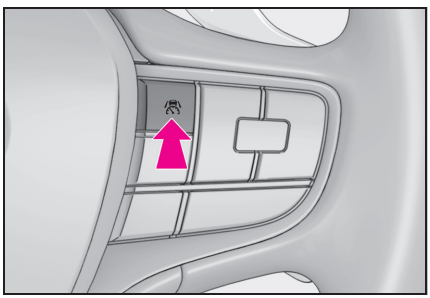
1 Press the driving assist mode select switch to select cruise control.

The cruise control indicator will illuminate.



2 Using the accelerator pedal, accelerate to the desired vehicle speed (approximately 20 mph [30 km/h] or more), and press the driving assist switch to set the set vehicle speed.

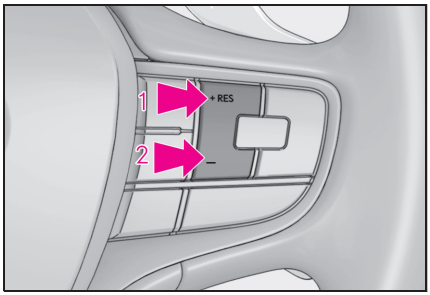
The vehicle speed at the moment the switch is released will be the set vehicle speed.



Adjusting the set vehicle speed

- Adjusting the set vehicle speed using the switches

To change the set vehicle speed, press the "+" switch or "-" switch until the desired speed is displayed.



1 Increase set vehicle speed

2 Decrease set vehicle speed

The set vehicle speed will increase or decrease as follows:

Fine adjustment: By 0.6 mph (1 km/h) or 1 mph (1.6 km/h) each time the switch is pressed

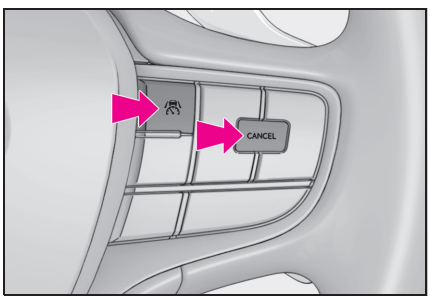
Large adjustment: Increases continuously while the switch is pressed and held

- Increasing the set vehicle speed using the accelerator pedal

1 Depress the accelerator pedal to accelerate the vehicle to the desired vehicle speed.

2 Press the "+" switch.

Canceling/resuming control



1 Press the cancel switch or driving assist switch to cancel control.

Control will also be canceled if the brake pedal is depressed.

2 Press the "RES" switch to resume control.

■ **Automatic cancellation of the cruise control**

In the following situations, the cruise control will be canceled automatically:

- When the vehicle speed drops approximately 10 mph (16 km/h) or more below the set vehicle speed
- When the vehicle speed drops below approximately 20 mph (30 km/h)
- When the brake control or output restriction control of a driving support system operates

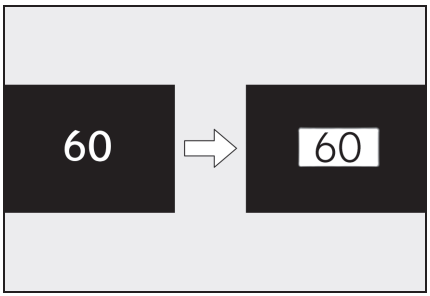
(For example: PCS, drive-start control)

- When the parking brake has been operated
- Situations in which some or all of the functions of the system cannot operate: →P.203

Display and system operation state

The operating state of cruise control is indicated.

Indicator	Multi-information display		Situation
 White		Blank	Cruise control being OFF

Indicator	Multi-information display		Situation
Green		Set vehicle speed: Green	Constant speed cruising
Green		Set vehicle speed: Green in reverse display	Set vehicle speed being exceeded

Emergency Driving Stop System

The emergency driving stop system is a system which automatically decelerates and stops the vehicle within its lane if the driver becomes unable to continue driving the vehicle, such as if they have suffered a medical emergency, etc.

During LTA (Lane Tracing Assist) control, if the system does not detect driving operations, such as if the driver is not holding the steering wheel, and determines the driver is not responsive, the vehicle will be decelerated and stopped within its current lane to help avoid a collision or reduce the impact of a collision.

The vehicle will also decelerate/stop during the Traffic Jam Assist (if equipped) controls, when no driver's response to the vehicle's warning to hold the steering wheel is detected.

⚠ WARNING

■ For safe use

- Driving safely is solely the responsibility of the driver. Pay careful attention to the surrounding conditions in order to ensure safe driving. The emergency driving stop system is designed to provide support in an emergency where it is difficult for the driver to continue driving, such as if they have had a medical emergency. It is not designed to support driving while drowsy or in poor physical health, or inattentive driving.
- Although the emergency driving stop system is designed to decelerate the vehicle within its lane to help avoid or help reduce the impact of a collision if the system determines that it is difficult for the driver to continue driving, its effectiveness may change according to various conditions. Therefore, it may not always be able to achieve the same level of performance. Also, if the operating conditions are not met, this function will not operate.
- After the emergency driving stop system operates, if driving becomes possible again, immediately begin driving again or, if necessary, park the vehicle on the shoulder of the road and set a warning reflector and flare to warn other drivers of your stopped vehicle.
- After this system operates, passengers should attend to the driver as necessary and take appropriate hazard prevention measures, such as moving to a place where safety can be ensured, such as the shoulder of the road or behind a guardrail.
- This system detects the condition of the driver through the operation of the steering wheel. This system may operate if the driver is aware but intentionally and continuously does not operate the vehicle. Also, the system may not operate if it cannot determine that the driver is not responsive, such as if they are leaning on the steering wheel.
- Situations in which the driver monitor may not operate properly (vehicles with a driver monitor): →P.203

Summary of the system

Operation of this system is separated into 4 control states. Through control state "Warning phase 1" and "Warning phase 2", the system determines if the driver is aware and responsive while outputting a warning and controlling

the vehicle speed. If the system determines the driver is not responsive, it will operate in control state "Deceleration stop phase" and "Stop hold phase" and decelerate and stop the vehicle. It will then operate continuously in "Stop hold phase".

■ **Operating conditions**

This system operates when all of the following conditions are met:

- When the LTA is on

Or during the Traffic Jam Assist controls (if equipped)

- When the vehicle speed is approximately 30 mph (50 km/h) or more

During the Traffic Jam Assist (if equipped) controls, the system may operate at below 30 mph (50 km/h).

■ **Operation cancelation conditions**

In the following situations, system operation will be canceled:

- When LTA control has been canceled (the LTA switch has been pressed, etc.)
- When the dynamic radar cruise control has been canceled
- When driver operations are detected (the steering wheel is held, the brake pedal, accelerator pedal, parking brake, hazard light switch, or turn signal lever is operated)
- When the driving assist switch is pressed while in the stop and hold phase
- When the engine switch has been turned from IGNITION ON mode to off
- Situations in which some or all of the functions of the system cannot operate: →P.203

■ **LTA control when operation is canceled**

When emergency driving stop system operation is canceled, LTA control may also be canceled.

Warning phase 1

If driving operations are not detected after the hands off steering wheel warning operates, a buzzer will sound intermittently and a message will be displayed to warn the driver, and the system will judge if the driver is responsive or not. If driving operations, such as holding the steering wheel, are not performed within a certain amount of time, the system will enter warning phase 2.

Vehicles with a driver monitor camera: Depending on the type of detection of the driver's unresponsiveness, the system may skip warning phase 1 and start the control of warning phase 2.

Warning phase 2

After entering warning phase 2, a buzzer will sound in short intervals and a message will be displayed to warn the driver, and the vehicle will slowly decelerate. If driving operations, such as holding the steering wheel, are not performed within a certain amount of time, the system will determine that the driver is not responsive and enter the deceleration stop phase.

The audio system will be muted until the driver becomes responsive.

When the vehicle is decelerating, the brake lights may illuminate, depending on the road conditions, etc.

Deceleration stop phase

After entering the deceleration stop

phase, a buzzer will sound continuously and a message will be displayed to warn the driver, and the vehicle will slowly decelerate and stop. After the vehicle stops, the system will enter the stop and hold phase.

Stop hold phase

After the vehicle is stopped, the parking brake will be applied automatically. After entering the stop and hold phase, the buzzer will continue sounding continuously and the emergency flashers (hazard lights) will flash to warn other drivers of the emergency.

■ Restricted functions after the operation is canceled

After shifting to the deceleration stop phase, the following functions will not be available until the engine is re-started even though the emergency driving stop system is canceled:

- LTA
- LCA (if equipped)
- Traffic Jam Assist (if equipped)

Traffic Jam Assist*

*: If equipped

Function Outline

Traffic Jam Assist is a system which, through confirmation of the conditions by the driver, provides lane keeping, accelerating/decelerating, stopping, and starting off support on some highways and expressways. Also, in an emergency, the system can decelerate and stop, to help avoid a collision or help reduce the impact of a collision.

Sensors that support the Traffic Jam Assist

- Sensors which detect the surrounding conditions (→P.198)
- Sensors which detect the driver condition (→P.199)

■ Situations in which some or all of the functions of the system cannot operate

→P.203

■ Changes in brake operation sound and pedal response

→P.203

■ Situations in which the driver monitor may not operate properly

→P.203

Emergency Driving Stop System

→P.256

Extended resume time of Dynamic radar cruise control

→P.242

Traffic Jam Assist Function

The Traffic Jam Assist function, through confirmation of the conditions by the driver, provides lane keeping, accelerating/decelerating and stopping support on some highways and expressways.

This function is operable when all of the operation conditions are met.

When this function is operating, it is possible to take your hands off of the steering wheel. (→P.261)

Before using the Traffic Jam Assist function, familiarize yourself with the content of the dynamic radar cruise control and the LTA (Lane Tracing Assist).

Make sure that the driver steers the vehicle when entering a service area/parking area or toll gate, or when changing lanes.

Driver monitor camera recording

When the operation of Traffic Jam Assist is started, the following message will be displayed:

- "Allow Driver Monitor Camera Recording?"

When recording is approved, the system records images of the area around the driver in certain crash or near crash-like situations, such as an SRS airbag being deployed or the vehicle hitting an object on the road. (→P.7)

WARNING

■ For safe use

- Driving safely is solely the responsibility of the driver. Do not overly rely on this system, and pay careful attention to the surrounding conditions in order to ensure safe driving.
- The Traffic Jam Assist function is not an automated driving system.
  This function provides the driver with information and driving assistance according to the road shape and conditions, traffic conditions, and the condition of the driver themself. Always pay careful attention to the surrounding conditions as use of the system is the responsibility of the driver.
- Depending on the condition of the surrounding area, the road, or the driver, the Traffic Jam Assist function may not operate or operation may be suspended. Also, it may not always be able to achieve the same level of performance. Read the operating conditions of the function carefully. Do not overly rely on this function and always drive carefully.
- As the recognition performance and control performance of the Traffic Jam Assist function are limited, driver operation is necessary to ensure safety while the system is operating. Also, the steering assist of this system is designed to operate only for slow steering operations during a traffic jam. While this function is operating, the lane deviation control function of the LDA will not operate. If, for some reason, the vehicle is about to deviate the lane, it is the driver's responsibility to drive properly.

WARNING

- Even if Traffic Jam Assist is operating properly, the surrounding conditions as recognized by the driver and detected by the system may differ. Therefore, it is necessary for the driver to pay attention, assess risks, and ensure safety. Over-reliance on this system to drive the vehicle safely may lead to an accident resulting in death or serious injury.
- While the Traffic Jam Assist function is operating, as driver operation may become necessary, the driver must ensure they have clear visibility of their surroundings.
- In certain situations, a message urging the driver to hold the steering wheel may be displayed by the Traffic Jam Assist function. In this case, hold the steering wheel and drive the vehicle manually to ensure safety.
- The Traffic Jam Assist function cannot detect the following objects. Operate the steering wheel, accelerator pedal, or brake pedal as necessary to avoid a collision. As the function will not be able to provide appropriate control, using it may lead to an accident resulting in death or serious injury.

  - Objects on the road surface
  - Vehicles outside of a lane (such as on the shoulder of the road)
  - Potholes, cracks, ruts, or other road damage
  - Road construction zones
  - Vehicles running in parallel with your vehicle or nearby walls
  - Animals

■ Situations in which Traffic Jam Assist Function should not be used

Do not use Traffic Jam Assist Function in situations such as the following. As the system will not be able to provide appropriate control, using it may lead to an accident resulting in death or serious injury.

- When it is necessary to disable the system

→P.197

- Situations in which the sensors may not operate properly

→P.201

- Situations in which the lane may not be detected

→P.202

■ Situations in which the function may not operate properly

In situations such as the following, the Traffic Jam Assist function may not operate properly. Manually operate the vehicle as necessary.

- When a sensor is splashed by water
- When the ambient temperature is high or low
- When a vehicle cuts in front of your vehicle
- When another lane merges into the lane in the same traveling direction as your vehicle
- When driving in low visibility condition
- When the vehicle posture is changing
- When the traction on the road surface differs greatly between the left and right side tires
- When driving on an expressway with no median strips or when driving on an expressway equipped with temporary median markers, such as poles.

WARNING

- When there is a significant difference in speed between your vehicle and the other vehicle
- The map data has not been updated properly.

■ To prevent malfunction of the radar sensors

→P.199

■ To prevent malfunction of the front camera

→P.199

■ Front camera installation area on the windshield

→P.201

■ Operating conditions of the function

This function is operable when all of the following conditions are met:

- The system detects lane lines and the path of preceding or surrounding vehicles.
- The dynamic radar cruise control and the lane tracing assist are operating.
- The turn signal lever is not being operated.
- The vehicle is not being driven around a sharp curve.
- The vehicle is being driven in the center of a lane.
- Vehicles with the driver monitor:The driver monitor camera is detecting that the driver is facing front of the vehicle.
- The vehicle is driving in traffic jam on a highway or expressway at approximately 25 mph (40 km/h) or less. (In some situations, such as when a traffic jam starts, this function may be operational at approximately 20 mph [30 km/h] or less.)
- The driver's door is closed.
- The driver's seat belt is fastened.
- Customized setting of the Traffic Jam Assist is not set to off.
- Functions and components composing the system are in proper condition.
- Customized setting of the PCS (Pre-Collision System) is not set to off.
- Customized setting of the dynamic radar cruise control (re-start time extension) is not set to off.

■ Temporary cancelation of the function

- When the operating conditions are no longer met, a function may be temporarily canceled. However, when the operation conditions are met again, operation of the function will automatically be restored.
- If the operating conditions of a function are no longer met while the function is operating, a buzzer may sound with a display to indicate that the function has been temporarily canceled. If no driver's responses to the indication are detected, the driver emergency stop assist function may operate. For types of display and action to be taken, see the page mentioned below. (→P.262)

■ Driving operations during controlled driving

- Accelerator pedal

As with normal driving, acceleration can be performed by depressing the accelerator pedal. In some situations, such as when driving at approximately 6 mph (10 km/h) or more and the accelerator pedal is depressed, this function will be canceled.

- Brake pedal

As with normal driving, deceleration can be performed by depressing the brake pedal. However, controlled driving will be cancelled.

- Steering wheel

As with normal driving, the steering wheel can be operated. If the steering wheel is operated more than a certain amount, controlled driving will be cancelled.

■ When a warning message is displayed

● "Traffic Jam Asst System Malfunction Visit Your Dealer"

The Traffic Jam Assist function may not be operating properly.

● "Traffic Jam Asst Unavailable Stop Assist Activated"

The system temporarily cannot be used as the driver emergency stop assist function has operated.

Changing Traffic Jam Assist settings

- The setting of Traffic Jam Assist can be enabled/disabled through a customize setting. (→P.510)
- The setting of driver monitor camera recording can be enabled/disabled through a customize setting. (→P.510)

Displays and system operation

The following displays indicate the operating status of the Traffic Jam Assist function:

Display	Status	Action to be taken
	Traffic Jam Assist function is operating	—
 (Grey)	Traffic Jam Assist function is about to end	Hold the steering wheel.
 (Orange)	Traffic Jam Assist function has ended	Hold the steering wheel.
 (Red)	Operation of either or both of dynamic radar cruise control /LTA (Lane Tracing Assist) ended	Manually operate the steering wheel immediately.

Display	Status	Action to be taken
 (Yellow)	Indicates that driving actions are necessary to cope with cut-in or other behavior of surrounding vehicles	The driver must operate the steering wheel, accelerator pedal and brake pedal in accordance with the surrounding environment.
	Indicates that the recording function of the driver monitor camera is operational (Blinking of this icon indicates that recording is undergoing, and constant illumination indicates ready for recording.)	—

BSM (Blind Spot Monitor)

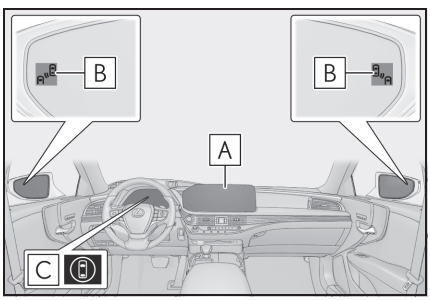
The Blind Spot Monitor is a system that uses rear side radar sensors installed on the inner side of the rear bumper on the left and right side to assist the driver in confirming safety when changing lanes.

WARNING

■ Cautions regarding the use of the system

- The driver is solely responsible for safe driving. Always drive safely, taking care to observe your surroundings.
- The Blind Spot Monitor is a supplementary function which alerts the driver that a vehicle is in a blind spot of the outside rear view mirrors or is approaching rapidly from behind into a blind spot. Do not overly rely on the Blind Spot Monitor. As the function cannot judge if it is safe to change lanes, over reliance could lead to an accident resulting in death or serious injury.
  As the system may not function correctly under certain conditions, the driver's own visual confirmation of safety is necessary.

System components



A Center Display

Turning the Blind Spot Monitor on/off.

B Outside rear view mirror indicators

When a vehicle is detected in a blind spot of the outside rear view mirrors or approaching rapidly from behind into a blind spot, the outside rear view mirror indicator (→P.68) on the detected side will illuminate. If the turn signal lever is operated toward the detected side, the outside rear view mirror indicator will flash and a buzzer will sound.

C Driving assist information indicator

Illuminates when the Blind Spot Monitor is turned off. At this time, a message will be displayed on the multi-information display.

■ Outside rear view mirror indicator visibility

In strong sunlight, the outside rear view mirror indicator may be difficult to see.

■ Buzzer

If the volume setting of the audio system is high or the surrounding area is loud, it may be difficult to hear the buzzer.

■ Customization

Some functions can be customized. (→P.510)

WARNING

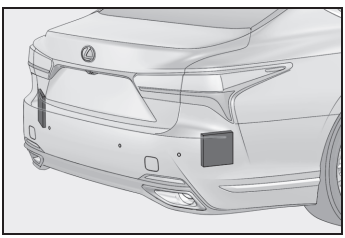
■ To ensure the system can operate properly

Blind Spot Monitor sensors are installed behind the left and right sides of the rear bumper respectively. Observe the following to ensure the Blind Spot Monitor can operate correctly.

WARNING

- Keep the sensors and the surrounding areas on the rear bumper clean at all times.

If a sensor or its surrounding area on the rear bumper is dirty or covered with snow, the Blind Spot Monitor may not operate and a warning message will be displayed. In this situation, clear off the dirt or snow and drive the vehicle with the operation conditions of the BSM function (→P.267) satisfied for approximately 10 minutes. If the warning message does not disappear, have the vehicle inspected by your Lexus dealer.



- Do not attach accessories, stickers (including transparent stickers), aluminum tape, etc. to a sensor or its surrounding area on the rear bumper.
- Do not paint the surrounding area of a sensor on the rear bumper.
- Do not subject a sensor or its surrounding area on the rear bumper to a strong impact.
  If a sensor is moved even slightly off position, the system may malfunction and vehicles may not be detected correctly.
  In the following situations, have your vehicle inspected by your Lexus dealer.
  - A sensor or its surrounding area is subject to a strong impact.
  - If the surrounding area of a sensor is scratched or dented, or part of them has become disconnected.
- Do not disassemble the sensor.
- Do not modify the sensor or surrounding area on the rear bumper.
- If a sensor or the rear bumper needs to be removed/installed or replaced, contact your Lexus dealer.
- The sensors are likely to be affected by paint on the rear bumper. If the rear bumper is not repaired correctly, the Blind Spot Monitor may not operate with a warning message displayed. If any paint repair is needed, contact your Lexus dealer.

Turning the Blind Spot Monitor on/off

The Blind Spot Monitor can be enabled/disabled through a customize setting. (→P.510)

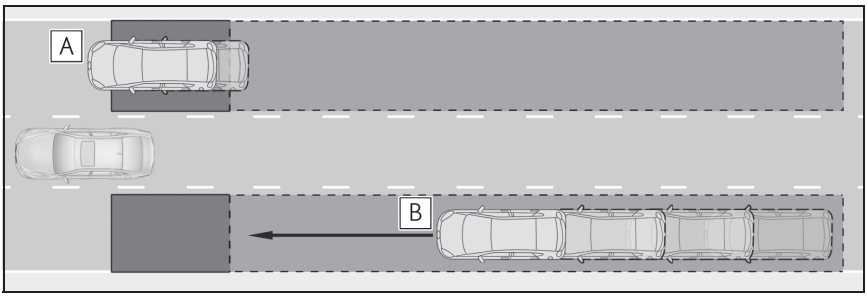
When the Blind Spot Monitor is off, the driving assist information indicator (→P.68) will illuminate and a message will be displayed on the multi-information display.

Each time the engine switch is turned to IGNITION ON mode, the Blind Spot Monitor is enabled.

Blind Spot Monitor operation

■ Objects that can be detected while driving

The Blind Spot Monitor uses rear side radar sensors to detect the following vehicles traveling in adjacent lanes and advises the driver of the presence of such vehicles via the indicators on the outside rear view mirrors.

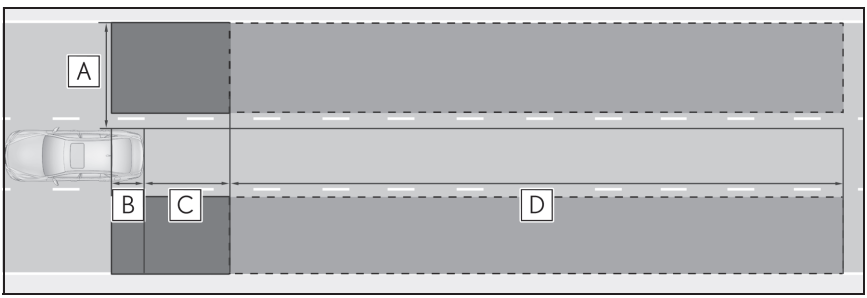


A Vehicles that are traveling in areas that are not visible using the outside rear view mirrors (the blind spots)

B Vehicles that are approaching rapidly from behind in areas that are not visible using the outside rear view mirrors (the blind spots)

■ Detection range while driving

The areas that vehicles can be detected in are outlined below.



The range of each detection area is:

A Approximately 1.6 ft. (0.5 m) to 11.5 ft. (3.5 m) from either side of the vehicle*1

B Approximately 3.3 ft. (1 m) forward of the rear bumper*2

C Approximately 9.8 ft. (3 m) from the rear bumper

D Approximately 9.8 ft. (3 m) to 230 ft. (70 m) from the rear bumper*3

*1: The area between the side of the vehicle and 1.6 ft. (0.5 m) from the side of the vehicle cannot be detected.

*2: While the vehicle is to being overtaken, up to approximately 9.8 ft. (3 m) forward of the

rear bumper will be detected.

*3: The greater the difference in speed between your vehicle and the detected vehicle is, the farther away the vehicle will be detected, causing the outside rear view mirror indicator to illuminate or flash.

■ The Blind Spot Monitor linked function

The LDA (Lane Departure Alert) has a function that uses information of detected vehicles driving in an adjacent lane. For details about the function and its operating conditions, P.226.

■ The Blind Spot Monitor is operational when

The Blind Spot Monitor is operational when all of the following conditions are met:

- The engine switch is in IGNITION ON mode.
- The Blind Spot Monitor is on.
- The shift position is in a position other than R.
- The vehicle speed is greater than approximately 7 mph (10 km/h).

■ The Blind Spot Monitor will detect a vehicle when

The Blind Spot Monitor will detect a vehicle present in the detection area in the following situations:

- A vehicle in an adjacent lane overtakes your vehicle.
- You overtake a vehicle in an adjacent lane slowly.
- Another vehicle enters the detection area when it changes lanes.

■ Situations in which the Blind Spot Monitor cannot detect vehicles

The Blind Spot Monitor cannot detect the following vehicles and other objects:

- Small motorcycles, bicycles, pedestrians, etc.*
- Vehicles traveling in the opposite direction
- Guardrails, walls, signs, parked vehicles and similar stationary objects*
- Following vehicles that are in the same lane*
- Vehicles traveling 2 lanes away from your vehicle*
- Vehicles which are being overtaken rapidly by your vehicle*

*: Depending on the conditions, detection of a vehicle and/or object may occur.

■ Conditions in which a buzzer may not sound

In situations such as the following, while the turn signal lever is being operated, the indicator will flash but a buzzer may not sound.

- When a second vehicle is detected while the turn signal lever is being held
- When overtaking a vehicle in the adjacent lane at a much higher speed than it*

*: Depending on the situations, a buzzer may sound.

■ Conditions under which the system may not function correctly

- The Blind Spot Monitor may not detect vehicles correctly in the following situations:
  - When the sensor is misaligned due to a strong impact to the sensor or its surrounding area
  - When mud, snow, ice, a sticker, etc. is covering the sensor or surrounding area on the rear bumper
  - When driving on a road surface that is wet with standing water during bad weather, such as heavy rain, snow, or fog
  - When multiple vehicles are approaching with only a small gap between each vehicle
  - When the distance between your vehicle and a following vehicle is short
  - When there is a significant difference in speed between your vehicle and the vehicle that enters the detection area

- When the difference in speed between your vehicle and another vehicle is changing
- When a vehicle enters a detection area traveling at about the same speed as your vehicle
- As your vehicle starts from a stop, a vehicle remains in the detection area
- When driving up and down consecutive steep inclines, such as hills, dips in the road, etc.
- When driving on roads with sharp bends, consecutive curves, or uneven surfaces
- When vehicle lanes are wide, or when driving on the edge of a lane, and the vehicle in an adjacent lane is far away from your vehicle
- When an accessory (such as a bicycle carrier) is installed to the rear of the vehicle
- When there is a significant difference in height between your vehicle and the vehicle that enters the detection area
- Immediately after the Blind Spot Monitor is turned on
- When towing with the vehicle

● Instances of the Blind Spot Monitor unnecessarily detecting a vehicle and/or object may increase in the following situations:

- When the sensor is misaligned due to a strong impact to the sensor or its surrounding area
- When the distance between your vehicle and a guardrail, wall, etc. that enters the detection area is short
- When driving up and down consecutive steep inclines, such as hills, dips in the road, etc.
- When vehicle lanes are narrow, or when driving on the edge of a lane, and a vehicle traveling in a lane other than the adjacent lanes enters the detection area
- When driving on roads with sharp bends, consecutive curves, or uneven surfaces
- When the tires are slipping or spinning
- When the distance between your vehicle and a following vehicle is short
- When an accessory (such as a bicycle carrier) is installed to the rear of the vehicle
- When towing with the vehicle

Safe Exit Assist

The safe exit assist is a system that uses rear side radar sensors installed on the inner side of the rear bumper to help occupants judge if an approaching vehicle or bicycle may collide with a door when exiting, to help reduce the possibility of a collision.

WARNING

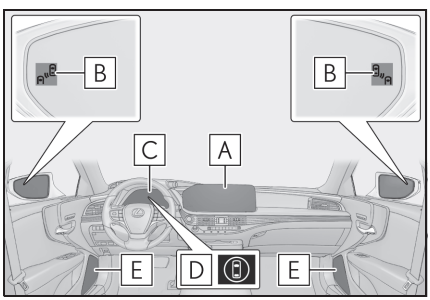
■ **Cautions regarding the use of the system**

● The driver is solely responsible for safe driving. Always drive safely, taking care to observe your surroundings.

● The safe exit assist is a supplementary system that, when the vehicle is stopped, informs occupants of the existence of approaching vehicles and bicycles. As this system alone cannot be used to judge safety, over-reliance on this system may lead to an accident resulting in death or serious injury.

In certain situations, this system may not function to its fullest extent. Therefore it is necessary for the occupants to visually check for safety directly and using the mirrors.

System components



A Center Display

Turning the safe exit assist on/off.

B Outside rear view mirror indicators

When a vehicle or bicycle which may collide with a door when opened is detected, the outside rear view mirror indicator (→P.68) on the detected side will illuminate. If the door on the detected side is opened, the outside rear view mirror indicator will blink.

C Multi-information display

If collision with a door is likely and the door is opened, the door will be displayed on the multi-information display. Also, if a door is opened when an outside rear view mirror indicator is illuminated, a buzzer will sound as a warning.

D Driving assist information indicator

Illuminates when the safe exit assist is turned off. At this time, a message will be displayed on the multi-information display.

E Speakers

When the outside rear view mirror indicator blinks, the driver is informed through voice guidance that the system has operated. After the notification through voice guidance is made, no more voice guidance notifications will be made again until the door is fully closed.

■ **Outside rear view mirror indicator visibility**

In strong sunlight, the outside rear view mirror indicator may be difficult to see.

■ **Buzzer**

If the volume setting of the audio system is high or the surrounding area is loud, it may be difficult to hear the buzzer.

■ **Voice notifications**

In the following situations, voice notifications will not be output:

- When it is estimated that no occupants are on board*
- After opening a door and entering the vehicle, until the engine is started
- When 3 minutes or more have elapsed since the engine was stopped
- When the language setting of the Center Display has been set to a language that does not support voice notifications
- When all of the doors have been locked from outside the vehicle
- When a door remains open for 1 minute or more after the engine is stopped
- When the ACCESSORY mode (→P.510) has been enabled through a customize setting on the Center Display and the engine has been stopped
- When the parking assist volume setting on the Center Display has been set to off

*: For each seating position, judgment is made based on the opening and closing of a door, before driving for ingress and after driving for egress.

■ **Customization**

Some functions can be customized. (→P.510)

WARNING

■ **To ensure the system can operate properly**

→P.264

Turning the safe exit assist system ON/OFF

The safe exit assist system can be enabled/disabled through a customize setting. (→P.510)

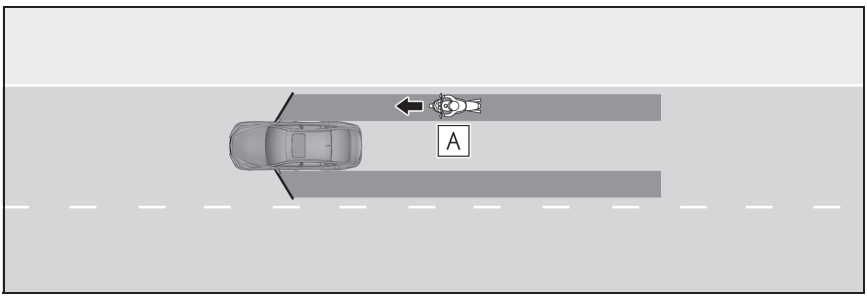
When the safe exit assist is off, the driving assist information indicator will illuminate and a message will be displayed on the multi-information display.
Each time the engine switch is turned to IGNITION ON mode, the safe exit

assist is enabled.

Safe exit assist operation

■ Objects that can be detected by the safe exit assist

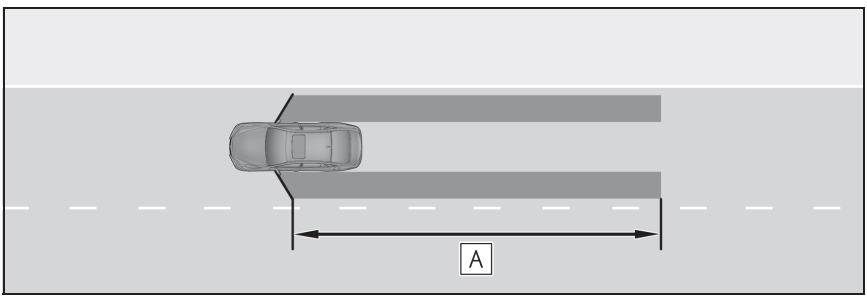
When the safe exit assist detects the following vehicles or bicycles behind your vehicle using a rear side radar sensor, the occupants of the vehicle are informed through an outside rear view mirror indicator, buzzer, multi-information display, and voice notification.



A Vehicle or bicycle which has a high possibility of colliding with a door when opened

■ The safe exit assist detection areas

The areas that vehicles can be detected in are outlined below.



A Approximately 145 ft. (45 m) rearward from the front door*

*: The faster a vehicle or bicycle is approaching, the distance at which an outside rear view mirror indicator will illuminate or blink will become further.

■ The safe exit assist is operational when

The safe exit assist is operational when all of the following conditions are met:

- When the engine switch is IGNITION ON mode, less than 3 minutes have elapsed since the engine was off, or less than 3 minutes have elapsed since a door was opened and someone has entered the vehicle (the time which operation is possible may be extended if a door is opened and closed)

- Safe exit assist is on
- The vehicle is stopped.
- The shift position is in a position other than R.

The safe exit assist will detect a vehicle when

The safe exit assist will detect a vehicle present in the detection area in the following situations:

- When the vehicle is stopped and a vehicle or bicycle, which is traveling parallel to the vehicle, is approaching within the area that a door opens

Conditions under which the system will not detect a vehicle

- Safe exit assist does not detect the following objects, vehicles, and bicycles:
  - Vehicles or bicycles which are approaching slowly*
  - Vehicles or bicycles which are determined to have a low possibility of colliding with a door when opened*
  - Vehicles or bicycles which are approaching from directly behind*
  - Vehicles or bicycles which are approaching from the front*
  - Guardrails, walls, signs, parked vehicles, and other stationary objects*
  - Pedestrians, animals, etc.*
- In situations such as the following, safe exit assist will not operate:
  - When 3 minutes or more have elapsed since the engine off (the time which operation is possible may be extended if a door is opened and closed)
  - When your vehicle is not completely stopped

*: Depending on the conditions, detection of a vehicle and/or object may occur.

Conditions under which the system may not function correctly

- The safe exit assist may not detect vehicles correctly in the following situations:
  - When the sensor is misaligned due to a strong impact to the sensor or its surrounding area
  - When mud, snow, ice, a sticker, etc. is covering the sensor or surrounding area on the rear bumper
  - When driving on a road surface that is wet with standing water during bad weather, such as heavy rain, snow, or fog
  - When a vehicle or bicycle approaches from behind a nearby parked vehicle
  - When an approaching vehicle or bicycle suddenly changes direction
  - Immediately after a vehicle or bicycle starts moving
  - When the trunk is open
  - When a bicycle carrier, ramp, or other accessory is installed to the back of the vehicle
  - When a parked vehicle, wall, sign, person or other stationary object is behind the vehicle
  - When the vehicle is stopped at an angle to the road
  - When a vehicle is traveling near an approaching vehicle or bicycle
  - When an approaching vehicle or bicycle is traveling along a stationary object, such a wall or sign
  - When a vehicle or bicycle is approaching at high speed
  - When towing with the vehicle
  - When stopped on a steep slope
  - When stopped on a curve or at the exit of a curve
- Instances of the safe exit assist unnecessarily detecting a vehicle and/or object may increase in the following situations:
  - When the sensor is misaligned due to a strong impact to the sensor or its surrounding area
  - When a vehicle or bicycle approaches your vehicle from directly behind in an offset position
  - When the vehicle is stopped at an angle to the road
  - When a vehicle or bicycle approaches from behind a parked vehicle at an angle
  - When a parked vehicle, wall, sign, person or other stationary object is behind the vehicle
  - When an approaching vehicle or bicycle suddenly changes direction
  - When an approaching vehicle or bicycle is traveling along a stationary object, such a wall or sign
  - When the trunk is open
  - When a bicycle carrier, ramp, or other

accessory is installed to the back of the vehicle
- When a vehicle or bicycle is approaching at high speed
- When towing with the vehicle
- When stopped on a steep slope
- When stopped on a curve or at the exit of a curve
- When a vehicle or bicycle approaches from behind a vehicle stopped in an adjacent lane

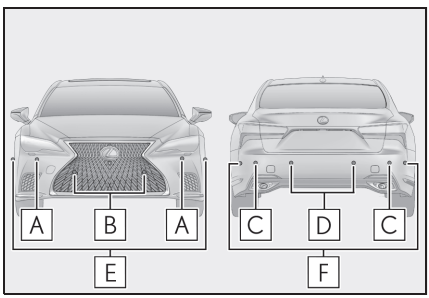
Intuitive parking assist*

*: If equipped

The intuitive parking assist function detects the approximate distance from the vehicle and an object such as a wall using ultrasonic sensors and informs the driver with the Center Display distance display and buzzer.

System components

Type of sensors



A Front corner sensors

B Front center sensors

C Rear corner sensors

D Rear center sensors

E Front side sensors (vehicles with Advanced Park)

F Rear side sensors (vehicles with Advanced Park)

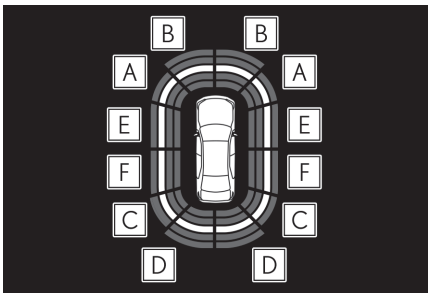
Display

When the sensors detect an object, such as a wall, a graphic is shown on the Center Display depending on the position and distance to the object.

Vehicles without Center Display or

rear camera: When detecting a stationary object, the intuitive parking assist detection indicator illuminates. (→P.68)

Center Display:



A Front corner sensor detection

B Front center sensor detection

C Rear corner sensor detection

D Rear center sensor detection

E Front side sensor detection (vehicles with Advanced Park)

F Rear side sensor detection (vehicles with Advanced Park)

Turning the intuitive parking assist function ON/OFF

The intuitive parking assist function can be enabled/disabled through a customize setting. (→P.510)

When the intuitive parking assist function is disabled, the intuitive parking assist OFF indicator (→P.68) illuminates on the multi-information display. If the system switches to OFF (disabled) and the intuitive parking assist is stopped, the intuitive parking assist will not be re-enabled until ON (enabled) is selected again from the customize setting (→P.510).
(It remains off even if the engine switch is turned to IGNITION ON mode again after the engine switch has been turned off.)

Vehicles without the Center Display or rear camera: However, the system will automatically turn on (enabled) and the intuitive parking assist OFF indicator will turn off if the shift position is changed to R.
When the shift position is R, the intuitive parking assist cannot be turned on or off.
The setting of intuitive parking assist itself will not change.

WARNING

■ Cautions regarding the use of the system

There is a limit to the degree of recognition accuracy and control performance that this system can provide, do not overly rely on this system. The driver is always responsible for paying attention to the vehicle's surroundings and driving safely.

■ To ensure the system can operate properly

Make sure to observe the following precautions. The system may not operate properly and may lead to an unexpected accident. When these precautions cannot be observed, turn the system off.

- Do not damage the sensors, and always keep them clean.
- Do not attach a sticker or install an electronic component, such as a backlit license plate (especially fluorescent type), fog lights, fender pole or wireless antenna near a radar sensor.

WARNING

- Do not subject the surrounding area of the sensor to a strong impact. If subjected to an impact, have the vehicle inspected by your Lexus dealer. If the front or rear bumper needs to be removed/installed or replaced, contact your Lexus dealer.
- Do not modify, disassemble or paint the sensors.
- Do not attach a license plate cover.
- Keep your tires properly inflated.
- Do not install a suspension other than a genuine suspension.

■ Notes when washing the vehicle

- When using a high pressure washer to wash the vehicle, do not spray the sensors directly, as doing so may cause a sensor to malfunction.
- When using steam to clean the vehicle, do not direct steam too close to the sensors, as doing so may cause a sensor to malfunction.

■ The system can be operated when

- The engine switch is in IGNITION ON mode.
- The intuitive parking assist is on.
- The vehicle speed is less than about 6 mph (10 km/h).
- A shift position other than P is selected.
- Vehicles without the Center Display or rear camera: The system will automatically turn on (enabled) and the intuitive parking assist OFF indicator will turn off if the shift position is changed to R.
  The setting of intuitive parking assist itself will not change.

■ Sensor detection information

- The sensor's detection areas are limited to the areas around the vehicle's front and rear bumpers.
- Certain vehicle conditions and the surrounding environment may affect the ability of a sensor to correctly detect an object.
- Objects may not be detected if they are too close to the sensor.
- There will be a short delay between object detection and display.
  Even at low speeds, there is a possibility that the object will come within the sensor's detection areas before the display is shown and the warning beep sounds.
- It might be difficult to hear the buzzer due to the volume of the audio system or air flow noise of the air conditioning system.
- It may be difficult to hear the sound of this system due to the buzzers of other systems.
- If the meter malfunctions, the buzzer may not sound.

■ Objects which the system may not be properly detected

The shape of the object may prevent the sensor from detecting it. Pay particular attention to the following objects:

- Wires, fences, ropes, etc.
- Cotton, snow and other materials that absorb sound waves
- Sharply-angled objects
- Low objects
- Tall objects with upper sections projecting outwards in the direction of your vehicle

People may not be detected if they are wearing certain types of clothing.

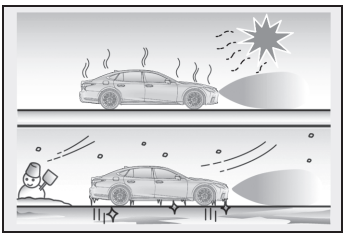
■ Situations in which the system may not operate properly

Certain vehicle conditions and the surrounding environment may affect the ability of a sensor to correctly detect objects. Particular instances where this may occur are listed below.

- There is dirt, snow, water drops or ice on a sensor. (Cleaning the sensors will resolve this problem.)
- A sensor is frozen. (Thawing the area will resolve this problem.)
  In especially cold weather, if a sensor is

frozen the sensor display may be displayed abnormally, or objects, such as a wall, may not be detected.

- When a sensor or the area around a sensor is extremely hot or cold.

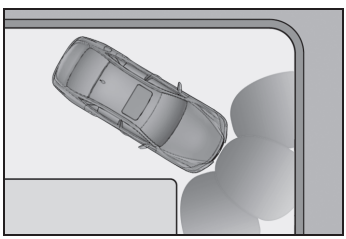


- On an extremely bumpy road, on an incline, on gravel, or on grass.
- When vehicle horns, vehicle detectors, motorcycle engines, air brakes of large vehicles, the clearance sonar of other vehicles or other devices which produce ultrasonic waves are near the vehicle
- A sensor is coated with a sheet of spray or heavy rain
- If objects draw too close to the sensor.
- When a pedestrian is wearing clothing that does not reflect ultrasonic waves (ex. skirts with gathers or frills).
- When objects that are not perpendicular to the ground, not perpendicular to the vehicle traveling direction, uneven, or waving are in the detection range.
- When strong winds are blowing
- When driving in inclement weather such as fog, snow or a sandstorm
- When an object that cannot be detected is between the vehicle and a detected object
- If an object such as a vehicle, motorcycle, bicycle or pedestrian cuts in front of the vehicle or runs out from the side of the vehicle
- If the orientation of a sensor has been changed due to a collision or other impact
- When equipment such as a towing eyelet, transport hook, bumper protector, bumper trim, bicycle carrier or snow-removal device (snow plow) is installed near the sensor
- If the front of the vehicle is raised or lowered due to the carried load
- If the vehicle cannot be driven in a stable manner, such as when the vehicle has been in an accident or is malfunctioning
- When tire chains, compact spare tire or an emergency tire puncture repair kit are used
- When towing with the vehicle

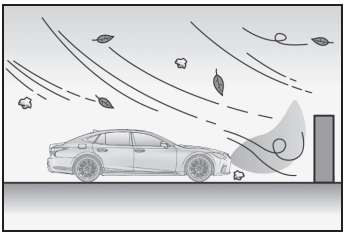
Situations in which the system may operate even if there is no possibility of a collision

In some situations, such as the following, the system may operate even though there is no possibility of a collision.

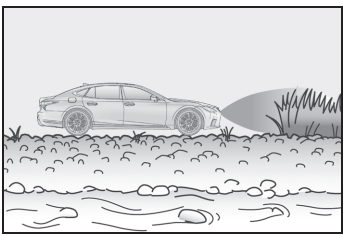
- When driving on a narrow road



- When driving toward a banner, flag, low-hanging branch or boom barrier (such as those used at railroad crossings, toll gates and parking lots)
- When there is a rut or hole in the surface of the road
- When driving on a metal cover (grating), such as those used for drainage ditches
- When driving up or down a steep slope
- If a sensor is hit by a large amount of water, such as when driving on a flooded road
- There is dirt, snow, water drops or ice on a sensor. (Cleaning the sensors will resolve this problem.)
- A sensor is coated with a sheet of spray or heavy rain
- When driving in inclement weather such as fog, snow or a sandstorm
- When strong winds are blowing



- When vehicle horns, vehicle detectors, motorcycle engines, air brakes of large vehicles, the clearance sonar of other vehicles or other devices which produce ultrasonic waves are near the vehicle
- If the front of the vehicle is raised or lowered due to the carried load
- If the orientation of a sensor has been changed due to a collision or other impact
- The vehicle is approaching a tall or curved curb
- Driving close to columns (H-shaped steel beams, etc.) in multi-story parking garages, construction sites, etc.
- If the vehicle cannot be driven in a stable manner, such as when the vehicle has been in an accident or is malfunctioning
- On an extremely bumpy road, on an incline, on gravel, or on grass

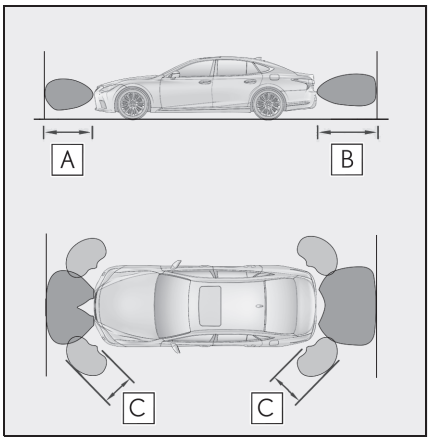


- When tire chains, compact spare tire or an emergency tire puncture repair kit are used
- When towing with the vehicle

Sensor detection display, object distance

■ Detection range of the sensors

▶ Vehicles without Advanced Park



A Approximately 3.3 ft. (100 cm)

B Approximately 4.9 ft. (150 cm)

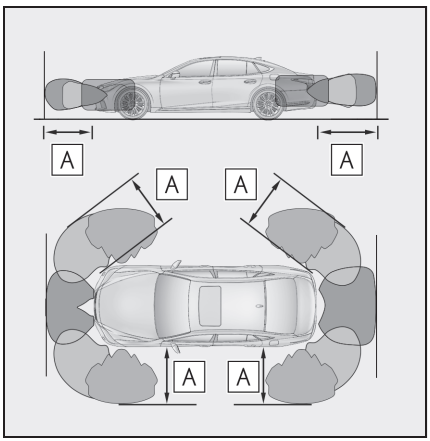
C Approximately 2.0 ft. (60 cm)

The diagram shows the detection range of the sensors.

Note that the sensors cannot detect objects that are extremely close to the vehicle.

The range of the sensors may change depending on the shape of the object, etc.

▶ Vehicles with Advanced Park



A Approximately 6.6 ft. (200 cm)

The diagram shows the detection range of the sensors.

Note that the sensors cannot detect objects that are extremely close to the vehicle.

The range of the sensors may change depending on the shape of the object, etc.

■ The distance and buzzer

▶ Vehicles without Advanced Park

Approximate distance to obstacle	Buzzer
Front center sensor: Approximately 3.3 ft. (100 cm) to 2.0 ft. (60 cm)* Rear center sensor: Approximately 4.9 ft. (150 cm) to 2.0 ft. (60 cm)*	Slow
Approximately 2.0 ft. (60 cm) to 1.5 ft. (45 cm)*	Medium
Approximately 1.5 ft. (45 cm) to 1.0 ft. (30 cm)*	Fast
Approximately less than 1.0 ft. (30 cm)	Continuous

▶ Vehicles with Advanced Park

Approximate distance to obstacle	Buzzer
Front center sensor: Approximately 6.6 ft. (200 cm) to 3.3 ft. (100 cm) Rear center sensor: Approximately 6.6 ft. (200 cm) to 4.9 ft. (150 cm) Corner sensor: Approximately 6.6 ft. (200 cm) to 2.0 ft. (60 cm) Side sensor: Approximately 6.6 ft. (200 cm) to 5.4 ft. (165 cm)	Does not sound (Display only)
Front center sensor: Approximately 3.3 ft. (100 cm) to 2.0 ft. (60 cm)* Rear center sensor: Approximately 4.9 ft. (150 cm) to 2.0 ft. (60 cm)* Side sensor: Approximately 5.4 ft. (165 cm) to 2.0 ft. (60 cm)*	Slow
Except side sensor: Approximately 2.0 ft. (60 cm) to 1.5 ft. (45 cm)* Side sensor: Approximately 2.0 ft. (60 cm) to 1.3 ft. (40 cm)*	Medium
Except side sensor: Approximately 1.5 ft. (45 cm) to 1.0 ft. (30 cm)* Side sensor: Approximately 1.3 ft. (40 cm) to 1.0 ft. (30 cm)*	Fast
Approximately less than 1.0 ft. (30 cm)	Continuous

*: Automatic buzzer mute function is enabled. (→P.279)

■ **Intuitive parking assist buzzer**

A buzzer sounds when the sensors are operating.

- The buzzer beeps faster as the vehicle approaches a static object. When the vehicle comes within the approximately 1.0 ft. (30 cm) of the object, the buzzer will sound continuously.
- When 2 or more sensors simultaneously detect a static object, the buzzer sounds for the nearest object.
- After a buzzer begins sounding, if the distance between the vehicle and the detected a static object does not become shorter, the buzzer will be muted automatically. (automatic buzzer mute function)

■ **Adjusting the buzzer volume**

The buzzer volume of the intuitive parking assist, RCTA, and RCD can all be changed at once from the customize settings. (→P.510)

■ **Muting a buzzer**

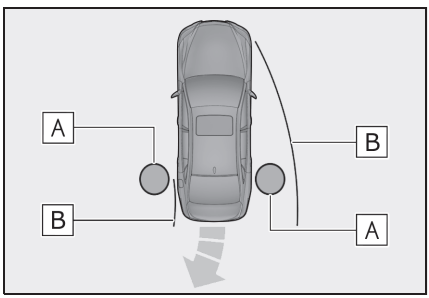
When the temporary mute switch is displayed on the Center Display, this switch can be pressed to temporarily mute the buzzer.

Select the switch to mute a buzzer of the intuitive parking assist, RCTA, and RCD all together.

- Mute will be automatically canceled in the following situations:
  - When the shift position is changed.
  - When the vehicle speed exceeds a certain speed.
  - When there is a malfunction in a sensor or the system is temporarily unavailable.
  - When the operating function is disabled manually.
  - When the engine switch is turned off.

Intuitive parking assist object warning function (vehicles with Advanced Park)

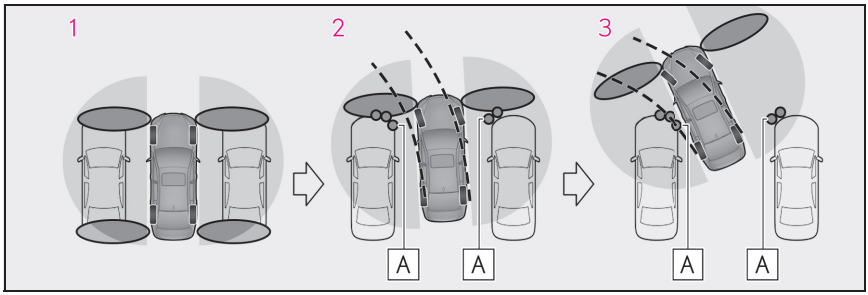
The object warning function informs the driver of the existence of objects along the side of the vehicle, using a display and buzzer, if the objects are within the estimated path of the vehicle.



A Object

B Calculated vehicle route

When the vehicle is moving, the side sensors or side cameras can detect objects. While the vehicle is moving, if a detected object can no longer be detected by the side sensors or side cameras, the location of the object relative to the vehicle is estimated. If the object is determined to be in the estimated path of the vehicle, the object warning function will operate.



A Object detected by side sensors or side cameras

1 The vehicle is stopped and objects along the sides of the vehicle are not detected.

2 Objects are detected as the vehicle is moving.

3 Even though the objects are outside of the detection area of the side sensors or side cameras, a warning is displayed and a buzzer sounds.

■ Object warning function operating conditions

- The vehicle moves about 23.0 ft. (7 m) after the engine is started.
- The R shift position is selected.
- After the D shift position has been selected, the vehicle has moved 23.0 ft. (7 m) or less.
- VIEW switch has been pressed and the Center Display is displayed.
- The front or rear sensor detects a stationary object.

■ Detection of objects along the sides of the vehicle

- Objects along the sides of the vehicle are not instantaneously detected. The location of objects in relation to the vehicle is estimated after they are first detected by the front or rear side sensors, or side cameras. Therefore, after the engine switch is changed to IGNITION ON mode, even if an object is along the side of the vehicle, it may not be detected until the vehicle has been driven a small amount and the side sensors or side cameras completely scan the areas along the sides of the vehicle.
- If a vehicle, person, animal, etc., is detected by a side sensors or side cameras, but then leaves the detection area of the side sensors or side cameras, the system will assume the object has not moved.

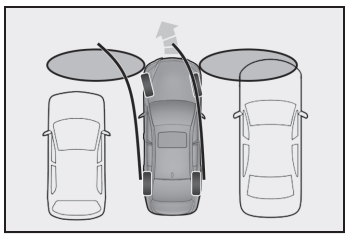
WARNING

■ Side sensors and side cameras

In situations such as the following, the function may not operate correctly, possibly leading to an accident. Proceed carefully.

WARNING

- When starting off shortly after the engine switch is turned to IGNITION ON mode and a small vehicle or other object which cannot be detected by a front side sensor is next to the vehicle. In the situation shown in the following illustration, even if the vehicle starts off, the vehicle on the left will not be detected and the object warning function will not operate.



- When an object or person is in a position which cannot be detected by the side sensors or side cameras.
- When, after the side sensors have completed scanning the areas along the sides of the vehicle, a vehicle, person, or other object approaches the side of the vehicle and cannot be detected.
- When the outside rear view mirror is closed, the side sensors or side cameras cannot detect objects.
- If the battery was discharged or has been removed and installed, fold and extend the outside rear view mirrors.

RCTA (Rear cross traffic alert) function

The RCTA function uses the BSM rear side radar sensors installed behind the rear bumper. This function is intended to assist the driver in checking areas that are not easily visible when backing up.

WARNING

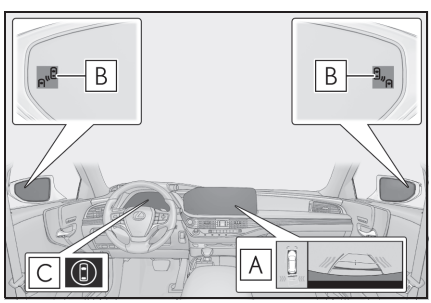
■ Cautions regarding the use of the system

The driver is solely responsible for safe driving. Always drive safely, taking care to observe your surroundings.
The RCTA function is only a supplementary function which alerts the driver that a vehicle is approaching from the right or left at the rear of the vehicle.
As the RCTA function may not function correctly under certain conditions, the driver's own visual confirmation of safety is necessary.
Over reliance on this function may lead to an accident resulting death or serious injury.

■ To ensure the system can operate properly

→P.264

System components



A Center Display

Turning the RCTA function on/off in Center Display.
If a vehicle approaching from the right or left at the rear of the vehicle is detected, the RCTA icon (→P.282) for the detected side will be displayed on the Center Display. This illustration* shows an example of a vehicle approaching from both sides of the vehicle.

*: Depending on the vehicle grade and equipped options, the actual screen may be different from this illustration.

B Outside rear view mirror indicators

If a vehicle is detected as approaching from the left or right behind the vehicle, both outside rear view mirror indicators (→P.68) will blink and a buzzer will sound.

C Driving assist information indicator

Illuminates when the RCTA is turned off. At this time, a message will be displayed on the multi-information display.

Turning the RCTA function on/off

The RCTA can be enabled/disabled through a customize setting. (→P.510)

When the RCTA function is off, the driving assist information indicator (→P.68) will illuminate and a message will be displayed on the multi-information display. Each time the engine switch is turned to IGNITION ON mode, the RCTA function is enabled.

Outside rear view mirror indicator visibility

In strong sunlight, the outside rear view mirror indicator may be difficult to see.

Hearing the RCTA buzzer

The RCTA buzzer may be difficult to hear over loud noises, such as if the audio system volume is high.

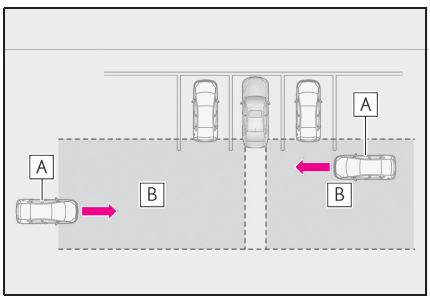
Rear side radar sensors

→P.264

RCTA function

Operation of the RCTA function

The RCTA function uses rear side radar sensors to detect vehicles approaching from the right or left at the rear of the vehicle and alerts the driver of the presence of such vehicles by flashing the outside rear view mirror indicators and sounding a buzzer.



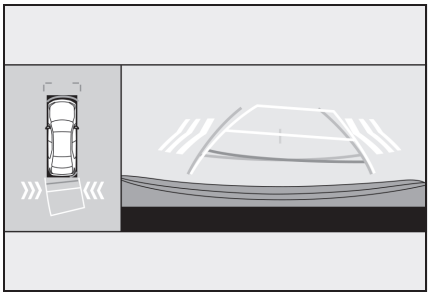
A Approaching vehicles

B Detection areas of approaching vehicles

RCTA icon display

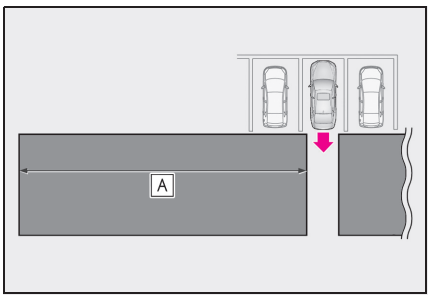
When a vehicle approaching from the right or left at the rear of the vehicle is detected, the following will be displayed on the Center Display.

- Example (Panoramic view monitor): Vehicles are approaching from both sides of the vehicle



■ RCTA function detection areas

The areas that vehicles can be detected in are outlined below.



The buzzer can alert the driver of faster vehicles approaching from farther away.

Example:

Approaching vehicle speed	A Approximate alert distance
34 mph (56 km/h) (fast)	98 ft. (30 m)
5 mph (8 km/h) (slow)	13 ft. (4 m)

■ The RCTA function is operational when

The RCTA function operates when all of the following conditions are met:

- The engine switch is IGNITION ON mode.
- The RCTA function is on.
- The shift position is in R.
- The vehicle speed is less than approximately 9 mph (15 km/h).
- The approaching vehicle speed is between approximately 5 mph (8 km/h) and 34 mph (56 km/h).

■ Setting the buzzer volume

The buzzer volume of the RCTA, intuitive parking assist, and RCD can be adjusted all together through a customize setting. (→P.510)

■ Muting a buzzer temporarily

When an object is detected, the temporary mute switch is displayed on the Center Display.
Select the switch to mute the buzzer of the intuitive parking assist, RCTA, and RCD all together.

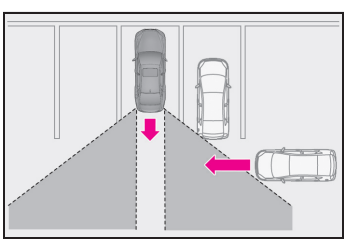
Mute will be canceled automatically in the following situations:

- When the shift position is changed.
- When the vehicle speed exceeds a certain speed.
- When there is a malfunction in a sensor or the system is temporarily unavailable.
- When the operating function is disabled manually.
- When the engine switch is turned off.

■ Conditions under which the system will not detect a vehicle

The RCTA function is not designed to detect the following types of vehicles and/or objects:

- Vehicles approaching from directly behind
- Vehicles backing up in a parking space next to your vehicle
- Vehicles that the sensors cannot detect due to obstructions



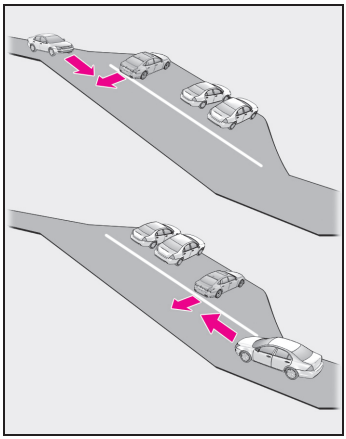
- Guardrails, walls, signs, parked vehicles and similar stationary objects*
- Small motorcycles, bicycles, pedestrians, etc.*
- Vehicles moving away from your vehicle
- Vehicles approaching from the parking spaces next to your vehicle*
- The distance between the sensor and approaching vehicle gets too close

*: Depending on the conditions, detection of a vehicle and/or object may occur.

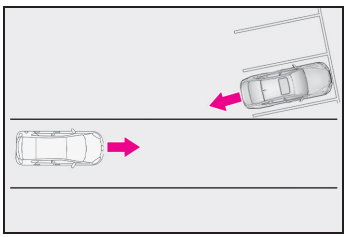
Situations in which the system may not operate properly

The RCTA function may not detect vehicles correctly in the following situations:

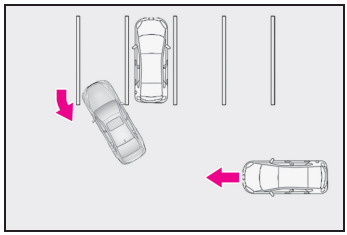
- When the sensor is misaligned due to a strong impact to the sensor or its surrounding area
- When mud, snow, ice, a sticker, etc., is covering the sensor or surrounding area on the position above the rear bumper
- When driving on a road surface that is wet with standing water during bad weather, such as heavy rain, snow, or fog
- When multiple vehicles are approaching with only a small gap between each vehicle
- When a vehicle is approaching at high speed
- When equipment that may obstruct a sensor is installed, such as a towing eyelet, bumper protector (an additional trim strip, etc.), bicycle carrier, or snow plow
- When backing up on a slope with a sharp change in grade



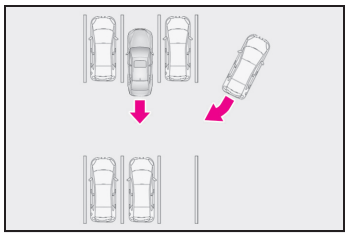
- When backing out of a sharp angle parking spot



- Immediately after the RCTA function is turned on
- Immediately after the engine is started with the RCTA function on
- When the sensors cannot detect a vehicle due to obstructions
- When towing with the vehicle
- When there is a significant difference in height between your vehicle and the vehicle that enters the detection area
- When a sensor or the area around a sensor is extremely hot or cold
- If the suspension has been modified or tires of a size other than specified are installed
- If the front of the vehicle is raised or lowered due to the carried load
- When turning while backing up



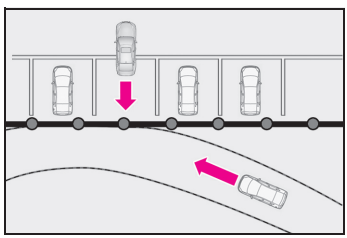
- When a vehicle turns into the detection area



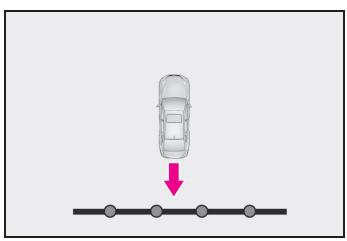
■ **Situations in which the system may operate even if there is no possibility of a collision**

Instances of the RCTA function unnecessary detecting a vehicle and/or object may increase in the following situations:

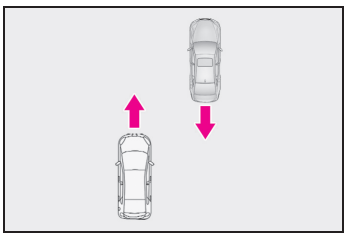
- When the parking space faces a street and vehicles are being driven on the street



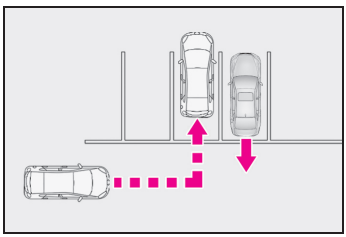
- When the distance between your vehicle and metal objects, such as a guardrail, wall, sign, or parked vehicle, which may reflect electrical waves toward the rear of the vehicle, is short



- When equipment that may obstruct a sensor is installed, such as a towing eye-let, bumper protector (an additional trim strip, etc.), bicycle carrier, or snow plow
- When a vehicle passes by the side of your vehicle



- When a detected vehicle turns while approaching the vehicle



- When there are spinning objects near your vehicle such as the fan of an air conditioning unit
- When water is splashed or sprayed toward the rear bumper, such as from a sprinkler
- Moving objects (flags, exhaust fumes, large rain droplets or snowflakes, rain water on the road surface, etc.)
- When the distance between your vehicle and a guardrail, wall, etc., that enters the detection area is short
- Gratings and gutters
- When a sensor or the area around a sensor is extremely hot or cold
- If the suspension has been modified or tires of a size other than specified are installed
- If the front of the vehicle is raised or lowered due to the carried load
- When towing with the vehicle.

RCD (Rear Camera Detection)

When the vehicle is backing up, the rear camera detection function can detect pedestrians in the detection area behind the vehicle. If a pedestrian is detected, a buzzer will sound and an icon will be displayed on the Center Display to inform the driver of the pedestrian.

WARNING

■ Cautions regarding the use of the system

The recognition and control capabilities for this system are limited.

The driver should always drive safely by always being responsible without over relying on the system and have a understanding of the surrounding situations.

■ To ensure the system can operate properly

Observe the following, otherwise there is the danger that could lead to an accident.

- Always clean the camera without damaging it.
- Do not install market electronic parts (such as illuminated license plate, fog lamps, etc.) in the camera vicinity.
- Do not subject the camera vicinity to strong impacts. If the vicinity is subjected to a strong impact, have the vehicle inspected by your Lexus dealer.
- Do not disassemble, remodel or paint the camera.
- Do not attach accessories or stickers to the camera.
- Do not install market protection parts (bumper trim, etc.) to the rear bumper.
- Maintain suitable tire air pressure.
- Make sure the trunk is completely closed.

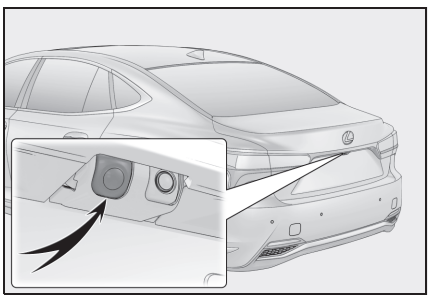
■ RCD function is turned off

In the following situations the system turns off. The RCD function may not operate properly and thus there is the danger that an accident may occur.

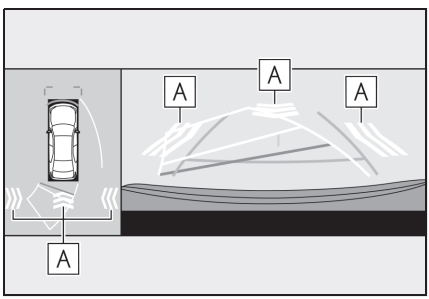
- The contents mentioned above are not observed.
- Suspensions other than the genuine parts are installed.

System component

Location of the rear camera



RCD display



A Pedestrian detection icon

Displayed automatically when a pedestrian

is detected behind the vehicle.

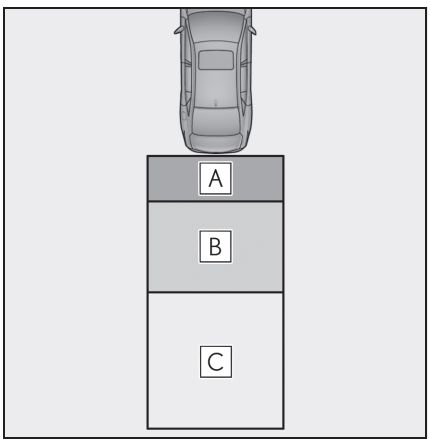
Turning the RCD function on/off

The RCD function can be enabled/disabled through a customize setting. (→P.510)

When the RCD function is disabled, the driving assist information indicator (→P.68) illuminates, and a message is displayed on the multi-information display.
Each time the engine switch is turned off then changed to IGNITION ON mode, the RCD function will be enabled automatically.

When a pedestrian is detected

If a pedestrian is in the area behind the vehicle or if the rear camera detected that a pedestrian is approaching the vehicle from behind, the system urges caution from the driver by sounding the buzzer and displaying the detection of a pedestrian on the Center Display as follows:



A If a pedestrian is detected in area A
Buzzer: Sounds repeatedly
Pedestrian detection icon: Blinks

B If a pedestrian is detected in area B
Buzzer (When the vehicle is stationary): Sounds 3 times
Buzzer (When the vehicle is backing up, when a pedestrian approaches the rear of the vehicle): Sounds repeatedly
Pedestrian detection icon: Blinks

C If the system determines that your vehicle may collide with a pedestrian in area C
Buzzer: Sounds repeatedly
Pedestrian detection icon: Blinks

The rear camera detection function is operational when

- The engine switch is IGNITION ON mode.
- RCD function is on.
- The shift position is in R.
- Advanced Park is not operating (if equipped)

Setting the buzzer volume

The buzzer volume of the intuitive parking assist, RCTA, and RCD can all be changed at once from the customize settings. (→P.510)

Muting a buzzer temporarily

When an object is detected, the temporary mute switch is displayed on the Center Display.
Select the switch to mute a buzzer of the intuitive parking assist, RCTA, and RCD all together.

Mute will be automatically canceled in the following situations:

- When the shift position is changed.
- When the vehicle speed exceeds a certain speed.
- When there is a malfunction in a sensor or the system is temporarily unavailable.
- When the operating function is disabled manually.
- When the engine switch is turned off.

■ **Situations in which the system may not operate properly**

- Some pedestrians, such as the following, may not be detected by the rear camera detection function, preventing the function from operating properly:
  - Pedestrians who are bending forward or squatting
  - Pedestrians who are lying down
  - Pedestrians who are running
  - Pedestrians who suddenly appear from the shadow of the vehicle or a building
  - Pedestrians who are riding moving objects such as a bicycle or skateboard
  - Pedestrians wearing oversized clothing such as a rain coat, long skirt, etc., making their silhouette obscure
  - Pedestrians whose body is partially hidden by an object, such as a cart or umbrella
  - Pedestrians which are obscured by darkness, such as at night
- In some situations, such as the following, pedestrians may not be detected by the rear camera detection function, preventing the function from operating properly:
  - When backing up in inclement weather (rain, snow, fog, etc.)
  - The lens is dirty (by dirt or snow-melting agent, etc.) or scratched
  - When a very bright light, such as the sun, or the headlights of another vehicle, shines directly into the rear camera
  - When backing up in a place where the surrounding brightness changes suddenly, such as at the entrance or exit of a garage or underground parking lot
  - When backing up in a dim environment such as during dusk or in an underground parking lot
  - When the camera position and direction are deviated
  - When a towing hook is attached
  - When water droplets are flowing on the camera lens
  - When the vehicle height is extremely changed (nose up, nose down, etc.)
  - When tire chains or an emergency tire puncture repair kit are used
  - When the suspension has been lowered or tires that have a different size than the genuine tires are installed
  - When an aftermarket electronic part (backlit license plate, fog light, etc.) is installed near the rear camera
  - If a bumper protector, such as an additional trim strip, is installed to the rear bumper
  - When towing with the vehicle

■ **Situations in which the system may operate unexpectedly**

- Even though there are no pedestrians in the detection area, some objects, such as the following, may be detected, possibly causing the rear camera detection function to operate.
  - Three dimensional objects, such as a pole, traffic cone, fence, or parked vehicle
  - Moving objects, such as a car or motorcycle
  - Objects moving toward your vehicle when backing up, such as flags or puddles (or airborne matter, such as smoke, steam, rain, or snow)
  - Cobblestone or gravel roads, tram rails, road repairs, white lines, pedestrian crossings or fallen leaves on the road
  - Metal covers (gratings), such as those used for drainage ditches
  - Objects reflected in a puddle or on a wet road surface
  - Shadows on the road
- In some situations, such as the following, the rear camera detection function may operate even though there are no pedestrians in the detection area.
  - When backing up toward the roadside or a bump on the road
  - When backing up toward an incline/decline
  - When the vehicle height is extremely changed (nose up, nose down, etc.)
  - When an aftermarket electronic part (backlit license plate, fog light, etc.) is installed near the rear camera

- If a bumper protector, such as an additional trim strip, is installed to the rear bumper
- If the orientation of the rear camera has been changed due to a collision or other impact, or removal and installation
- If a towing eyelet is installed to the rear of the vehicle
- When water is flowing over the rear camera lens
- The lens is dirty (by dirt or snow-melting agent, etc.)
- If there is a flashing light in the detection area, such as the emergency flashers of another vehicle
- When tire chains or an emergency tire puncture repair kit are used
- When towing with the vehicle

● Situations in which the rear camera detection function may be difficult to notice

- The buzzer may be difficult to hear if the surrounding area is noisy or the audio system volume is high.
- If the temperature in the cabin is extremely high or low, the Center Display may not operate correctly.

PKSB (Parking Support Brake)

The PKSB (Parking Support Brake) is a system that issues warnings and automatically performs braking to help reduce collision damage with operation targets that were detected when traveling at a low speed such as when parking.

PKSB (Parking Support Brake) system

The system has detected the following as operation targets. (The operation targets vary depending on the function.)

- Parking Support Brake function (static objects front and rear of the vehicle): →P.293
- Parking Support Brake function (moving vehicles rear of the vehicle): →P.297
- Parking Support Brake function (pedestrians rear of the vehicle): →P.298
- Parking Support Brake function (static objects around the vehicle) (vehicles with the Advanced Park): →P.293

WARNING

■ Cautions regarding the use of the system

Do not overly rely on the system, as doing so may lead to an accident. Always drive while checking the safety of the surroundings of the vehicle.

WARNING

Depending on the vehicle and road conditions, weather, etc., the system may not operate.

The detection capabilities of sensors and radars are limited. Always drive while checking the safety of the surroundings of the vehicle.

- The driver is solely responsible for safe driving. Always drive carefully, taking care to observe your surroundings. The Parking Support Brake system is designed to provide support to lessen the severity of collisions. However, it may not operate in some situations.
- The Parking Support Brake system is not designed to stop the vehicle completely. Additionally, even if the system has stopped the vehicle, it is necessary to depress the brake pedal immediately as brake control will be canceled after approximately 2 seconds.
- It is extremely dangerous to check the system operations by intentionally driving the vehicle into the direction of a wall, etc. Never attempt such actions.

■ When to disable the Parking Support Brake

In the following situations, disable the Parking Support Brake as the system may operate even though there is no possibility of a collision.

- When inspecting the vehicle using a chassis roller, chassis dynamo or free roller
- When loading the vehicle onto a boat, truck or other transport vessel
- If the suspension has been modified or tires of a size other than specified are installed
- If the front of the vehicle is raised or lowered due to the carried load
- When equipment such as a towing hook, transport hook, bumper protector, bumper trim, bicycle carrier or snow-removal device (snow plow) is installed near the sensor
- When using automatic car washing devices
- If the vehicle cannot be driven in a stable manner, such as when the vehicle has been in an accident or is malfunctioning
- When the vehicle is driven in a sporty manner or off-road
- When the tires are not properly inflated
- When the tires are very worn
- When tire chains, a compact spare tire or an emergency tire puncture repair kit are used.
- When towing with the vehicle

■ Precautions for the suspension

Do not modify the suspension of the vehicle. If the height or tilt of the vehicle is changed, the sensors may not be able to detect detectable objects and the system may not operate correctly, possibly leading to an accident.

Enabling/Disabling the Parking Support Brake

The Parking Support Brake function can be enabled/disabled through a customize setting. (→P.510)

When the PKSB (Parking Support Brake) is disabled, the driving assist information indicator (→P.68) illuminates, and a message is displayed on the multi-information display. If the system switches to OFF (disabled) and the PKSB (Parking Support Brake) is

stopped, the PKSB (Parking Support Brake) will not be re-enabled until ON (enabled) is selected again from the customize setting (→P.510).
(It remains off even if the engine switch is turned to IGNITION ON mode again after the engine switch has been turned off.)

Display and buzzer for engine output restriction control and brake control

If the engine output restriction control or brake control operates, a buzzer will sound and a message will be displayed on the Center Display and multi-information display, to alert the driver.

Depending on the situation, output restriction control operates to either limit acceleration or restrict output as much as possible.

- Engine output restriction control is operating (acceleration restriction)

Acceleration greater than a certain amount is restricted by the system.

Center Display: No warning displayed

Multi-information display: "Object Detected Acceleration Reduced"

Driving assist information indicator: Not illuminated

Buzzer: Does not sound

- Engine output restriction control is operating (output restricted as much as possible)

The system has determined that stronger-than-normal brake operation is necessary.

Center Display (vehicles with panoramic view monitor): "BRAKE!"

Multi-information display: "BRAKE!"

Driving assist information indicator: Not illuminated

Buzzer: Short beep

- Brake control is operating

The system determined that emergency braking is necessary.

Center Display (vehicles with panoramic view monitor): "BRAKE!"

Multi-information display: "BRAKE!"

Driving assist information indicator: Not illuminated

Buzzer: Short beep

- Vehicle stopped by system operation

The vehicle has been stopped by brake control operation.

Center Display (vehicles with panoramic view monitor): "Switch to Brake"

Multi-information display: "Accelerator Pedal is Pressed Press Brake Pedal"

If the accelerator pedal is not depressed, "Press Brake Pedal" will be displayed.

Driving assist information indicator: Illuminated

Buzzer: Sounds repeatedly

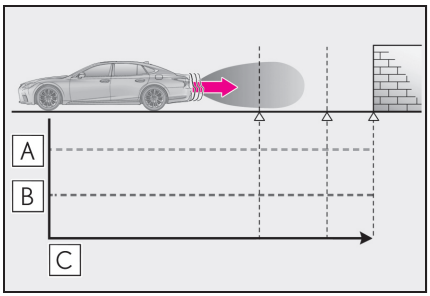
System overview

If the Parking Support Brake determines that a collision with a detected object or pedestrian is possible, the engine output will be restricted to restrain any increase in the vehicle speed. (Engine output restriction control: See figure 2 below.)

Additionally, if the accelerator pedal

continues to be depressed, the brakes will be applied automatically to reduce the vehicle speed. (Brake control: See figure 3.)

- Figure 1: When the PKSB (Parking Support Brake) is not operating

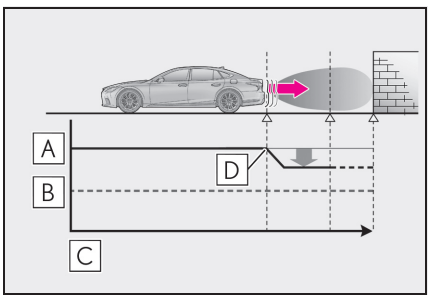


A Engine output

B Braking force

C Time

- Figure 2: When engine output restriction control operates



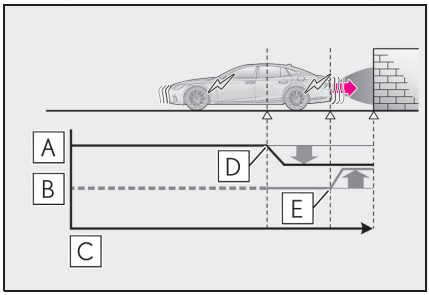
A Engine output

B Braking force

C Time

D Engine output restriction control begins operating (System determines that possibility of collision with detected object is high)

- Figure 3: When engine output restriction control and brake control operates



A Engine output

B Braking force

C Time

D Engine output restriction control begins operating (System determines that possibility of collision with detected object is high)

E Brake control begins operating (System determines that possibility of collision with detected object is extremely high)

If the Parking Support Brake has operated

If the vehicle is stopped due to operation of the Parking Support Brake, the Parking Support Brake will be disabled and the driving assist information indicator will illuminate.

In addition, even when the PKSB (Parking Support Brake) operates, the brake control is canceled after approximately 2 seconds to start off.

Furthermore, the brake control also can be canceled by depressing the brake pedal. Depressing the accelerator pedal again after that allows the vehicle to start off.

Re-enabling the Parking Support Brake

To re-enable the Parking Support Brake when it is disabled due to operation of the PKSB (Parking Support Brake), either enable the system again, or turn the engine switch off and then back to IGNITION ON

mode.

Additionally, if any of the following conditions are met, the system will be re-enabled automatically and the driving assist information indicator will turn off (→P.68):

- The P shift position is selected
- Drive with no operation targets in the traveling direction of the vehicle
- Change the traveling direction of the vehicle*

*: Except the Parking Support Brake function (pedestrians rear of the vehicle)

■ Buzzer

Regardless of whether the intuitive parking assist is enabled or not (→P.273), if the PKSB (Parking Support Brake) system is enabled (→P.290), the buzzer will sound to notify the driver of the approximate distance to the object when the brake control and the engine output restriction control are operated.

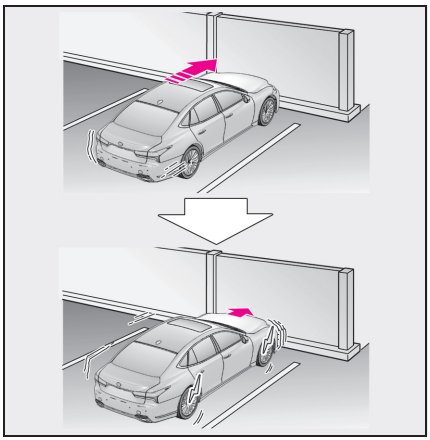
Parking Support Brake function (static objects front and rear of the vehicle/static objects around the vehicle)

If the sensors detect a static object, such as a wall, in the traveling direction of the vehicle and the system determines that a collision may occur due to the vehicle suddenly moving forward due to an accidental accelerator pedal operation, the vehicle moving the unintended direction due to the wrong shift position being selected, or while parking or traveling at low speeds, the system will operate to lessen the impact with the detected static object and reduce the resulting damage.

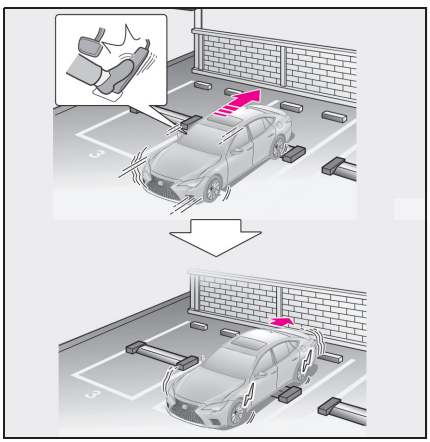
Examples of function operation (static objects front and rear of the vehicle)

This function will operate in situations such as the following if an object is detected in the traveling direction of the vehicle.

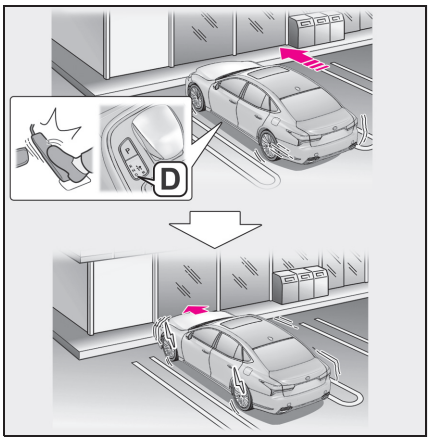
■ When traveling at a low speed and the brake pedal is not depressed, or is depressed late



■ When the accelerator pedal is depressed excessively



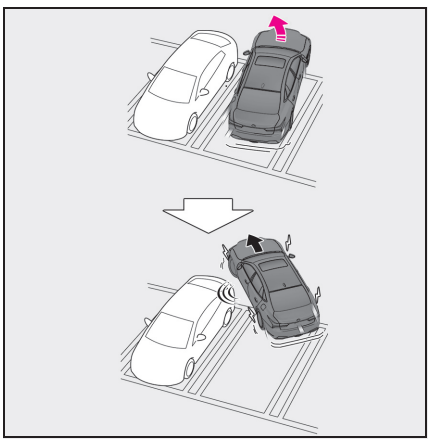
■ When the vehicle moves forward due to the incorrect shift position being selected



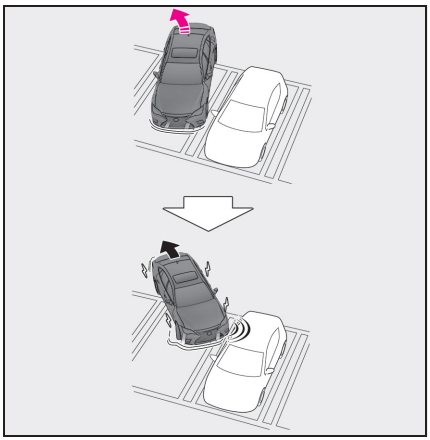
Examples of function operation (static objects around the vehicle) (vehicles with Advanced Park)

The system will operate in the following situations when a stationary object is detected in the surrounding area.

■ When moving forward and a collision with a stationary object on the inner side of a turn is likely



■ When reversing and a collision with a stationary object on the outer side of a turn is likely



Types of sensors

→P.272

WARNING

■ To ensure the system can operate properly

→P.273

■ If the Parking Support Brake function operates unnecessarily, such as at a railroad crossing

→P.292

■ Notes when washing the vehicle

→P.273

■ The Parking Support Brake function (static objects front and rear of the vehicle) will operate when

The function will operate when the driving assist information indicator is not illuminated (→68) and all of the following conditions are met:

● Engine output restriction control
- The Parking Support Brake is enabled.
- The vehicle speed is approximately 9 mph (15 km/h) or less.
- There is a static object in the traveling direction of the vehicle and approximately 6 to 13 ft. (2 to 4 m) away.
- The Parking Support Brake determines that a stronger-than-normal brake operation is necessary to avoid a collision.

● Brake control
- Engine output restriction control is operating.
- The Parking Support Brake determines that an immediate brake operation is necessary to avoid a collision.

■ The Parking Support Brake function (static objects around the vehicle) will operating when (vehicles with Advanced Park)

This function is operable when any of the following conditions is met in addition to the operating conditions for static objects in front and rear of the vehicle.

● After the engine has been started, the vehicle has moved approximately 23.0 ft. (7 m) or less

● The R shift position is selected.

● After the shift position has been changed from R to D, the vehicle has moved approximately 23.0 ft. (7 m) or less

■ The Parking Support Brake function (static objects front and rear of the vehicle/static objects around the vehicle) will stop operating when

The function will stop operating if any of the following conditions are met:

● Engine output restriction control
- The Parking Support Brake is disabled.
- The system determines that the collision has become avoidable with normal brake operation.
- The static object is no longer approximately 6 to 13 ft. (2 to 4 m) away from the vehicle or in the traveling direction of the vehicle.

● Brake control
- The Parking Support Brake is disabled.
- Approximately 2 seconds have elapsed since the vehicle was stopped by brake control.
- The brake pedal is depressed after the vehicle is stopped by brake control.

- The static object is no longer approximately 6 to 13 ft. (2 to 4 m) away from the vehicle or in the traveling direction of the vehicle.

■ **Detection range of the Parking Support Brake function (static objects front and rear of the vehicle/static objects around the vehicle)**

The detection range of the Parking Support Brake function (static objects front and rear of the vehicle/static objects around the vehicle) differs from the detection range of the intuitive parking assist (→P.276). Therefore, even if the intuitive parking assist detects an object and provides a warning, the Parking Support Brake function (static objects front and rear of the vehicle/static objects around the vehicle) may not start operating.

■ **Situations in which the system may not operate properly**

→P.274

■ **Situations in which the system may operate even if there is no possibility of a collision**

→P.275

■ **Situations in which the system may operate even though there is no possibility of a collision (static objects around the vehicle) (vehicles with Advanced Park)**

In addition to the situations in which static objects in front and rear of the vehicle (→P.295) may not be detected, objects may not be detected by the sensors in the following situations:

- When moving sideways, such as when parallel parking (→P.312)

■ **Detection of objects along the sides of the vehicle (static objects around the vehicle) (vehicles with Advanced Park)**

- Objects along the sides of the vehicle are not instantaneously detected. The location of objects in relation to the vehicle is estimated after they are first detected by the front or rear side sensors, or side cameras. Therefore, after the engine switch is changed to IGNITION ON mode, even if an object is along the side of the vehicle, it may not be detected until the vehicle has been driven a small amount and the side sensors or side cameras completely scan the areas along the sides of the vehicle.
- If a vehicle, person, animal, etc., is detected by a side sensors or side cameras, but then leaves the detection area of the side sensors or side cameras, the system will assume the object has not moved.

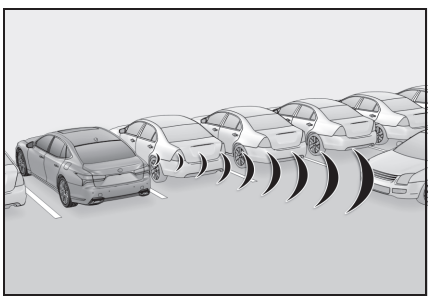
Parking Support Brake function (moving vehicles rear of the vehicle)

If a rear radar sensor detects a vehicle approaching from the right or left at the rear of the vehicle and the system determines that the possibility of a collision is high, this function will perform brake control to reduce the likelihood of an impact with the approaching vehicle.

Examples of the function operation

This function will operate in situations such as the following if a vehicle is detected in the traveling direction of the vehicle.

■ **When reversing, a vehicle is approaching and the brake pedal is not depressed, or is depressed late**



Types of sensors

→P.264

WARNING

■ **To ensure the system can operate properly**

→P.264

■ **The Parking Support Brake function (moving vehicles rear of the vehicle) will operate when**

The function will operate when the driving assist information indicator is not illuminated (→P.68) and all of the following conditions are met:

● Engine output restriction control
- The Parking Support Brake is enabled.
- The vehicle speed is approximately 9 mph (15 km/h) or less.
- Vehicles are approaching from the right or left at the rear of the vehicle at a traveling speed of approximately 5 mph (8 km/h) or more.
- The shift position is in R.
- The Parking Support Brake determines that a stronger than normal brake operation is necessary to avoid a collision with an approaching vehicle.

● Brake control
- Engine output restriction control is operating.
- The Parking Support Brake determined that an emergency brake operation was necessary to avoid a collision with a vehicle approaching from the rear.

■ **The Parking Support Brake function (moving vehicles rear of the vehicle) will stop operating when**

The function will stop operating if any of the following conditions are met:

● Engine output restriction control
- The Parking Support Brake is disabled.
- The collision becomes avoidable with normal brake operation.
- A vehicle is no longer approaching from the right or left at the rear of the vehicle.

● Brake control
- The Parking Support Brake is disabled.
- Approximately 2 seconds have elapsed since the vehicle was stopped by brake control.

- The brake pedal is depressed after the vehicle is stopped by brake control.

■ **Situations in which the system may not operate properly**

→P.284

■ **Situations in which the system may operate even if there is no possibility of a collision**

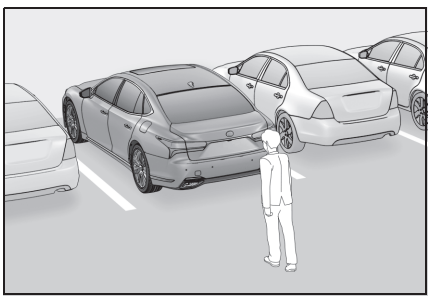
→P.285

Parking Support Brake function (pedestrians rear of the vehicle)

If the rear camera sensor detects a pedestrian behind the vehicle while backing up and the system determines that the possibility of colliding with the detected pedestrian is high, a buzzer will sound. If the system determines that the possibility of colliding with the detected pedestrian is extremely high, the brakes will be applied automatically to help reduce the impact of the collision.

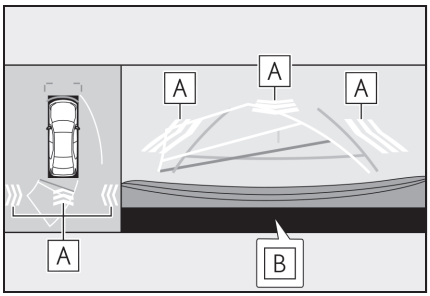
Examples of system operation

The system operates when an approaching pedestrian is detected behind the vehicle while backing up, and when the brake pedal is not depressed or is depressed late.



Screen display of pedestrians rear of the vehicle

Displays a message to urge the driver to take evasive action when a pedestrian is detected in the detection area behind the vehicle.



A Pedestrian detection icon

B "BRAKE!"

WARNING

■ If the Parking Support Brake function (pedestrians rear of the vehicle) operates unnecessarily

Depress the brake pedal immediately after the Parking Support Brake function (pedestrians rear of the vehicle) operates. (Operation of the function is canceled by depressing the brake pedal.)

■ Correct use of the Parking Support Brake function (pedestrians rear of the vehicle)

→P.286

■ The Parking Support Brake function (pedestrians rear of the vehicle) will operate when

The function will operate when the driving assist information indicator is not illuminated (→P.68, 457) and all of the following conditions are met:

● Engine output restriction control
- The Parking Support Brake is enabled.
- The vehicle speed is 9 mph (15 km/h) or less.
- The shift position is in R.
- When a pedestrian is to the rear of the vehicle
- The PKSB (Parking Support Brake) determines that a stronger than-normal-brake operation is necessary to avoid a collision.

● Brake control
- Engine output restriction control is operating.
- The Parking Support Brake determines that an emergency brake operation is necessary to avoid a collision with a pedestrian.

■ The Parking Support Brake function (pedestrians rear of the vehicle) will stop operating when

The function will stop operating if any of the following conditions are met:

● Engine output restriction control
- The Parking Support Brake is disabled.
- The collision becomes avoidable with normal brake operation.
- The pedestrian is no longer detected behind your vehicle.

● Brake control
- The Parking Support Brake is disabled.
- Approximately 2 seconds have elapsed since the vehicle was stopped by brake control.
- The brake pedal is depressed after the vehicle is stopped by brake control.

■ Re-enabling the Parking Support Brake function (pedestrians rear of the vehicle)

→P.292

■ Detection area of the Parking Support Brake function (pedestrians rear of the vehicle)

The detection area of the Parking Support Brake function (pedestrians rear of the vehicle) differs from the detection area of the RCD function (→P.287). Therefore, even if the RCD function detects a pedestrian and provides an alert, the Parking Support Brake function (pedestrians rear of the vehicle) may not start operating.

■ Situations in which the system may not operate properly

→P.288

■ Situations in which the system may operate unexpectedly

→P.288

Lexus Teammate Advanced Park*

*: If equipped

Function description

The Advanced Park is a system which assists in a safe and smooth parking or exiting from a parking space by displaying the blind spots around the vehicle and the target parking spot through a bird's eye view, delivering operation guidance through displays and buzzer operation, and changing the shift position, operating the steering wheel, accelerator pedal, and brake pedal.

Additionally, the panoramic view monitor* can display the area in front, behind, and from above the vehicle, helping confirm the condition of the area around the vehicle.

The turn signal lights will blink automatically when the parking assistance starts until the vehicle reaches the target parking spot, to notify people around the vehicle that parking is being performed.

Depending on the condition of the road surface or the vehicle, the distance between the vehicle and a parking space, etc., it may not be possible to assist in parking in the target space.

Only use Advanced Park in accordance with all local road traffic laws and regulations.

*: For details on the panoramic view monitor refer to the "MULTIMEDIA OWNER'S MANUAL".

Functions

■ Perpendicular parking (forward/reverse) function

Assistance is provided from the position the vehicle is stopped near the target parking space until the vehicle is in the parking space. (→P.308)

■ Perpendicular exiting (forward/reverse) function

Assistance is provided from the parked position until the vehicle is in a position where you can easily exit from the parking space. (→P.311)

■ Parallel parking function

Assistance is provided from the position the vehicle is stopped near the target parking space until the vehicle is in the parking space. (→P.312)

■ Parallel exiting function

Assistance is provided from the parked position until the vehicle is in a position where you can easily exit from the parking space. (→P.315)

■ Memory function

Assistance is provided until the vehicle is guided into a previously registered parking space. (→P.317)

⚠ WARNING

■ Cautions regarding the use of the system

The recognition and control capabilities for this system are limited. The driver should always drive safety by always being responsible without over relying on the system and have a understanding of the surrounding situations.

WARNING

- As with a normal vehicle, take care to observe your surroundings while the vehicle is moving.
- Always pay attention to the vehicle's surroundings while the system is operating and depress the brake pedal as necessary to slow or stop the vehicle.
- When parking, make sure that the vehicle can be parked in the target parking space before beginning operation.
- Depending on the condition of the road surface or the vehicle, the distance between the vehicle and a parking space, etc., it may not be possible to detect a parking space or the system may not be able to provide assistance to the point the vehicle is fully parked.
- This system will guide the vehicle to appropriate positions for changing the direction of travel, however, if you feel that the vehicle is approaching too close to an adjacent parked vehicle at any time, depress the brake pedal and change the shift position. However, if this is performed, the number of times the vehicle changes direction may increase, and the vehicle may be parked at an angle.
- As certain objects or materials, such as the following, may not be detected, make sure to check the safety of the area around your vehicle and depress the brake pedal to stop the vehicle if it may collide with an object.
  - Thin objects (wires, fences, ropes, poles, etc.) or objects that appear like thin from a certain angle of approach (signs, bicycles, etc.)
  - Materials that absorb sound waves (cotton, snow, etc.)
  - Sharp-edged objects (block walls/columns, wall corners, etc.)
  - Objects in lower places (curb stones/blocks, stairs, parking blocks, etc.)
  - Tall objects with upper sections that protrude outward (beams, etc.)
  - Objects which are not perpendicular to the ground
  - Objects to which the vehicle is approaching diagonally
- Even if there is an object in the target parking space, it may not be detected and assistance may be performed.
- If it is likely that your vehicle will collide with a nearby vehicle, object, or person, or go over the top of a parking block, depress the brake pedal to stop the vehicle and press the Advanced Park main switch to disable the system.
- Never use only the Center Display to view the area behind the vehicle. The image displayed may differ than the actual situation. Using only the screen when backing up may lead to an accident, such as a collision with another vehicle. When backing up, make sure to look directly or use the mirrors to check the safety of the area around your vehicle, especially behind the vehicle.
- When the ambient temperature is extremely low, the screen may appear dark or the displayed image may become unclear. Also, as moving objects may appear distorted or may not be able to be seen on the screen, make sure to directly check the safety of the area around your vehicle.
- In the following situations, while the vehicle is stopped and held by Advanced Park, it may be canceled and the vehicle may start moving. Immediately depress the brake pedal. Failure to do so may lead to an accident.
  - When the driver's door is opened

WARNING

- When operations instructed by the system are not performed within a certain amount of time
- When the brake pedal is depressed and the vehicle is stopped for a certain amount of time
- When the system malfunctions

● As the steering wheel will turn while this system is operating, pay attention to the following.

- Be careful so that a necktie, scarf, or arm does not get caught. Keep your upper body away from the steering wheel. Also, keep children away from the steering wheel.
- Long fingernails may be caught and when the steering wheel is rotating, leading to injury.
- In an emergency, depress the brake pedal to stop the vehicle, and then press the Advanced Park main switch to disable the system.

● Do not allow anyone to put their hands outside of a window while this system is operating.

■ To ensure correct operation of the Advanced Park

Observe the following precautions. Failing to do so may result in the vehicle being unable to be driven safely and possibly cause an accident.

● Do not use this system in situations such as the following:

- When in areas other than common parking spaces
- When the surface of the parking space is sand or gravel and is not clearly defined with parking space lines
- When the parking space is not level, such as on a slope, or having differences in height, holes, or gutters
- Mechanical parking system
- Parking lot with a device which raises to contact the bottom of the vehicle
- When the road surface is frozen, slick, or covered with snow
- When it is extremely hot and the asphalt is melting
- When there are objects around the vehicle
- When there is an object between your vehicle and the target parking spot or within the target parking spot (within the displayed blue box)
- When in high pedestrian or vehicle traffic areas
- When the parking space is in a location that is difficult to park in (too narrow for your vehicle, etc.)
- When images are unclear due to dirt or snow attached to the camera lens, light being shined into the camera or shadows
- When tire chains or a compact spare tire is installed to the vehicle
- When the doors or trunk are not completely closed
- When an arm is held outside of a window
- In inclement weather such as heavy rain or snow

● Make sure to use only standard sized tires, such as those that were installed to the vehicle when it was shipped from the factory. Otherwise, Advanced Park may not operate properly. Also, when the tires have been replaced, the displayed position of the lines or box displayed on the screen may become incorrect. When replacing the tires, contact your Lexus dealer.

WARNING

- In situations such as the following, it may not be possible for the system to provide assistance to a registered parking spot or to operate correctly:
  - When the tires are extremely worn or the tire inflation pressure is low
  - When carrying a heavy load
  - When the vehicle is tilted due to the carried load
  - When a heater is installed in the surface of the parking space (road surface freeze prevention heater)
  - When the wheels are misaligned, such after a wheel has been subjected to a strong impact
  - When a pedestrian or passing vehicle is detected during assistance
  - When a device, such as a towing hook, bumper protector, bumper trim, bicycle carrier, snow plow, etc., is installed
  - When something is incorrectly detected as a parking line (light, reflections from a building, difference in height on the parking surface, a gutter, painted road lines, redrawn lines, etc.)

If the vehicle deviates greatly from the set parking space in any situation other than the above, have the vehicle inspected by your Lexus dealer.

NOTICE

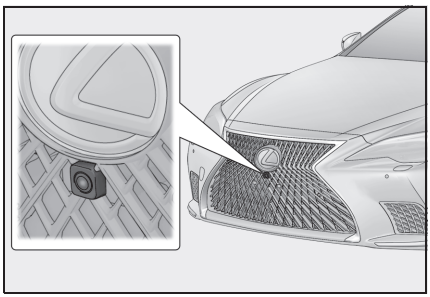
■ Precautions for use Advanced Park

If the battery was discharged or has been removed and installed, fold and extend the outside rear view mirrors.

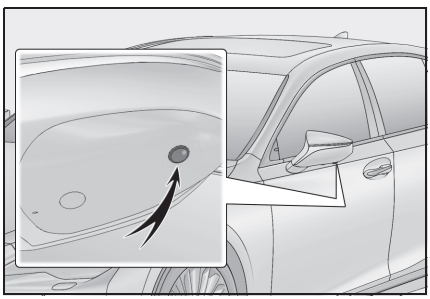
Types of cameras and sensors used for the Advanced Park

Cameras and sensors are used to detect parked vehicles, making it easier to identify parking spaces.

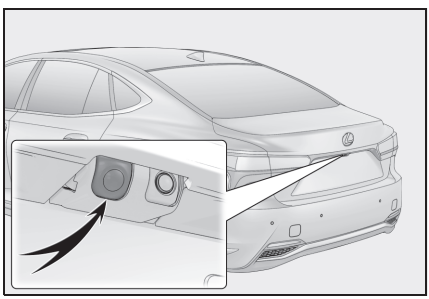
▶ Front camera



▶ Side cameras



▶ Rear camera



▶ Sensors

→P.272

■ Camera images

As special cameras are used, the colors in displayed images may differ from the actual color.

■ **Precautions for use**

For details on the following, refer to "Panoramic view monitor" of "Parking assist system" in the "MULTIMEDIA OWNER'S MANUAL".

- Displayable range of the screens
- Cameras
- Differences between displayed images and the actual road
- Differences between displayed images and the actual objects

■ **Detection range of the cameras and sensors**

- If a parked vehicle is behind the target parking space and the distance between it and the vehicle becomes far, it may no longer be able to be detected. Depending on shape or condition of a parked vehicle, the detection range may become short or the vehicle may not be detected.
- Objects other than parked vehicles, such as columns, walls, etc., may not be detected. Also, if they are detected, they may cause the target parking space to be misaligned.

■ **Situations in which parking space lines may not be recognized properly**

- In situations such as the following, parking space lines on the road surface may not be detected:
  - When the parking space does not use lines (parking space boundaries are marked with rope, blocks, etc.)
  - When the parking space lines are faded or dirty, making them unclear
  - When the road surface is bright, such as concrete, and the contrast between it and the white parking space lines is small
  - When the parking space lines are any color other than yellow or white
  - When the area surrounding the parking space is dark, such as at night, in an underground parking lot, parking garage, etc.
  - When it is raining or has rained and the road surface is wet and reflective or there are puddles
  - When the sun is shining directly into a camera, such as in the early morning or evening
  - When the parking space is covered with snow or de-icing agent
  - When there marks from repairs or other marks on the road surface, or there is a traffic bollard, or other object on the road surface
  - When the color or brightness of the road surface is uneven
  - When a camera has been splashed by hot or cold water and the lens has fogged up
  - When the appearance of the parking space is affected by the shadow of the vehicle or trees
  - When a camera lens is dirty or covered with water droplets
- In situations such as the following, the target parking space may not be recognized correctly:
  - When there marks from repairs or other marks on the road surface, or there is a parking block, traffic bollard, or other object on the road surface
  - When it is raining or has rained and the road surface is wet and reflective or there are puddles
  - When the area around the vehicle is dark or backlit
  - When the color or brightness of the road surface is uneven
  - When the parking space is on a slope
  - When there are diagonal lines (access aisle) near the parking space
  - When the appearance of the parking space is affected by the shadow of a parked vehicle (such as shadows from the grille, side step, etc.)
  - When accessories which obstruct the view of the camera are installed
  - When the parking space lines are faded or dirty, making them unclear
  - When the appearance of the parking space is affected by the shadow of the vehicle or trees

■ **Sensor detection information**

→P.274

■ **Objects which the sensor may not be properly detected**

→P.274

■ Situations in which the sensor may not operate properly

→P.274

■ Situations in which parking assistance may not operate even if there is no possibility of a collision

→P.275

WARNING

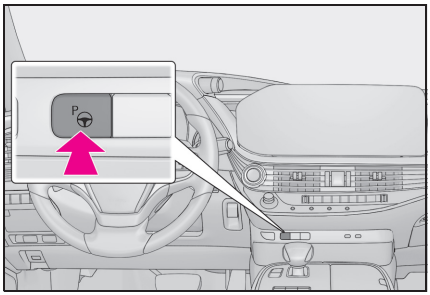
■ Precautions for the cameras and sensors

- Due to the characteristics of the camera lens, the position of and distance to people and objects displayed on the screen may differ from the actual situation. For details, refer to the "MULTIMEDIA OWNER'S MANUAL".
- Make sure to observe the precautions for using the intuitive parking assist, otherwise a sensor may not operate correctly, possibly leading to an accident. (→P.273)
- In situations such as the following, the sensors may not operate correctly, possibly leading to an accident. Proceed carefully.
  - When there is a parked vehicle next to the target parking space, if the displayed target parking space is far from the actual target parking space, a sensor may be misaligned. Have the vehicle inspected by your Lexus dealer.
  - Do not install any accessories near the detection area of the sensors.

Turning the Advanced Park system on/off

Press the Advanced Park main switch.

If the switch is pressed while assistance is being performed, the assistance will be canceled.



■ Operating conditions of the Advanced Park

Assistance will begin when all of the following conditions are met:

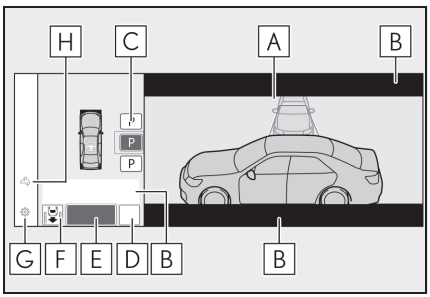
- The brake pedal is depressed
- The vehicle is stopped
- The driver's seat belt is fastened
- The steering wheel is not being operated
- The accelerator pedal is not depressed
- All of the doors and the trunk are closed
- The outside rear view mirrors are not folded
- The parking brake is not engaged
- The dynamic radar cruise control are not operating
- ABS, VSC, TRAC, PCS and PKSB are not operating
- The vehicle is not on a steep slope
- The VSC and TRAC are not turned off

If assistance cannot be started, check the message displayed on the Center Display. (→P.324)

Advanced Park guidance screens

Guidance screens are displayed on the Center Display.

▶ Guidance screen (When assistance starts)



A Target parking space box (blue)

B Advice display

C Parking type change button

If multiple buttons are displayed, depending on the condition of the button its function differs as follows.

P or P : Change the target to another parking space.

P or P : Select the current target parking space.

: Select to change to the parallel parking function

: Change the perpendicular parking (forward/reverse) function

D "MODE" button

Select to change between the memory function and the perpendicular parking (forward/reverse) function and parallel parking function. (→P.319)

E "Start" button

Select to start parking assistance.

F Perpendicular parking direction change button

Select to change between the parking (forward) function and parking (reverse) function.

: Change the perpendicular parking (forward) function

: Change the perpendicular parking (reverse) function

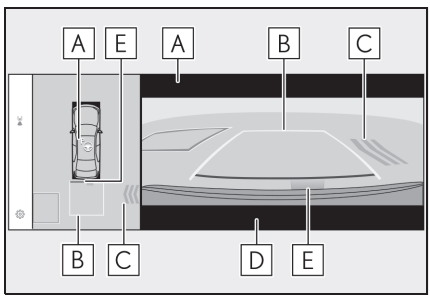
G Customize setting button

Select to display the Advanced Park setting screen. (→P.323)

H Registration button

Select to begin registering a parking space.

▶ Guidance screen (When reversing)



A Operation icon

Displayed when the Advanced Park is operating.

B Guide lines (yellow and red)

Display points from the center of the edge of the front or rear bumper to the target stopping position (yellow)* and approximately 1 ft. (0.3 m) (red) from the vehicle.

C Moving object warning icon

D Emergency support brake control operation display

"BRAKE!" is displayed.

E Intuitive parking assist display →P.272

*: The yellow lateral line is not displayed when the target stopping position is approximately 8.2 ft. (2.5 m) or more away from the vehicle.

■ **Intuitive parking assist pop-up display**

Regardless of whether the intuitive parking assist is off or on (→P.273), if an object is detected by the intuitive parking assist when the Advanced Park is operating, the intuitive parking assist pop-up display will automatically be displayed over the guidance display.

■ **Brake control operation when Advanced Park is operating**

While the Advanced Park is operating, if the system determines that the possibility of collision with detected moving or stationary object is high, the engine output restriction control and brake control will operate.

If brake control operates, Advanced Park operation will be suspended and a message will be displayed on the multi-information display.

■ **Buzzer**

Depending on surrounding sounds or sounds from other systems, it may be difficult to hear the buzzer of this system.

■ **If a black screen is displayed on the Center Display when the Advanced Park is operating**

The system is being affected by radio waves or may be malfunctioning. If a radio antenna is installed near a camera, move it to a location as far from the cameras as possible. If a radio antenna is not installed near a camera, and the screen does not return to normal after turning the engine switch off and then starting the engine again, have the vehicle inspected by your Lexus dealer.

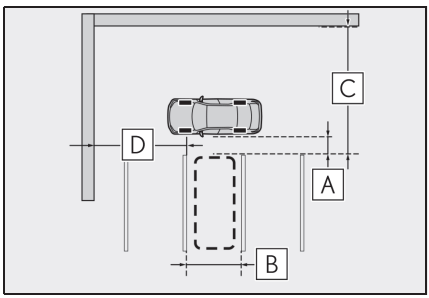
Perpendicular parking (forward/reverse) function

The perpendicular parking (forward/reverse) function can be used if the target parking space can be detected when the vehicle is stopped close and perpendicular to the center of the parking space. Also, depending on the condition of the parking space, etc., if it is necessary to change the direction of travel of the vehicle, the shift position can be changed by assistance control.

Parking using the perpendicular parking (forward/reverse) function

1 Stop the vehicle at a position close and perpendicular to the center of the target parking space.

▶ If there are parking space lines



A Approximately 3.3 ft. (1 m)*

B Approximately 8.2 ft. (2.5 m)*

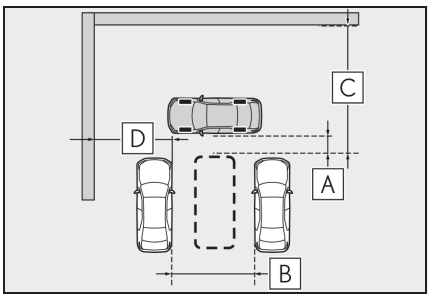
C Approximately 19.7 ft. (6 m) or more*

D Approximately 18.0 ft. (5.5 m) or more*

The system can operate even if there is a parking space line on only one side of the target parking space.

*: This is a reference measurement for detection of a parking space. Depending on the surrounding environment, detection may not be possible.

▶ If there is an adjacent parked vehicle



A Approximately 3.3 ft. (1 m)*

B Approximately 9.8 ft. (3 m) or more*

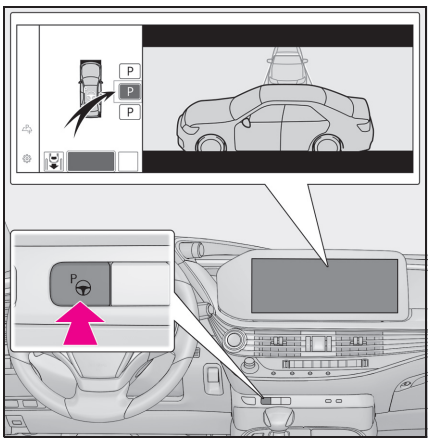
C Approximately 19.7 ft. (6 m) or more*

D Approximately 18.0 ft. (5.5 m) or more*

The system can operate even if there is a vehicle on only one side of the target parking space.

*: This is a reference measurement for detection of a parking space. Depending on the surrounding environment, detection may not be possible.

2 Press the Advanced Park main switch and check that a possible parking space is displayed on the Center Display.

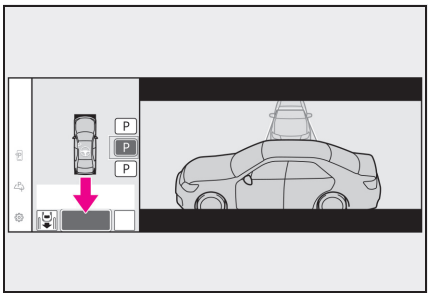


- If a space which your vehicle can be parked is detected, a target parking space box will be displayed.
- If it is possible to parallel park in the space, select the parking space, and then select to change to the parallel parking function.
- If it is possible to change the direction which a parking space is entered, select the parking space, and then select or change the direction.
- Depending on the surrounding environment, it may not be possible to use this function. According to the information displayed on the Center Display, use the function on another parking space.

3 Select "Start" button.

A buzzer will sound, an operation message will be displayed on the multi-information

display, and assistance will begin operating.



- When the brake pedal is released, "Moving Forward...", "Backing Up..." will be displayed and the vehicle will begin moving forward/reverse.
- To cancel assistance, press the Advanced Park main switch.

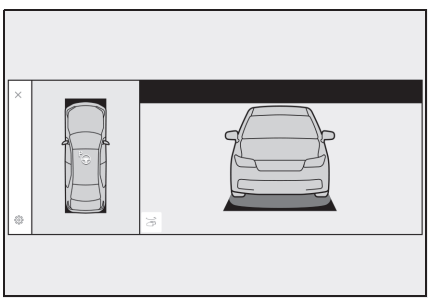
If assistance is canceled, "Advanced Park Cancel" will be displayed.

If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter: P.310

4 Perform operations as indicated by the advice displays until the vehicle stops in the target parking space.

When the vehicle stops, "Advanced Park Finished" will be displayed and parking assistance will end.

If you select on the Center Display, the vehicle displayed on the parking assist completion screen will rotate.



If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter

Depress the brake pedal to stop the vehicle and then change the shift position to change the direction of travel of the vehicle. At this time, assist will be suspended. However, if the "Start" button is selected, assist will resume and the vehicle will move in the direction corresponding to the selected shift position.

When the brakes have been operated

When the brakes have been operated, brake operation sound may be heard. This does not indicate a malfunction.

NOTICE

When using the perpendicular parking (forward/reverse) function

- Make sure that there are no obstructions within the yellow guide lines and between the vehicle and target parking spot. If there are any obstructions between the vehicle and the target parking space, or between the yellow guide lines, cancel the function.
- As the target parking space will not be able to be set correctly if the surface of the parking space is on a slope or has differences in height, the vehicle may stray from the target parking space or be slanted. Therefore, do not use the function for this kind of parking spot.
- When parking in a narrow parking space, the vehicle may closely approach an adjacent parked vehicle. If a collision seems likely, depress the brake pedal to stop the vehicle.

NOTICE

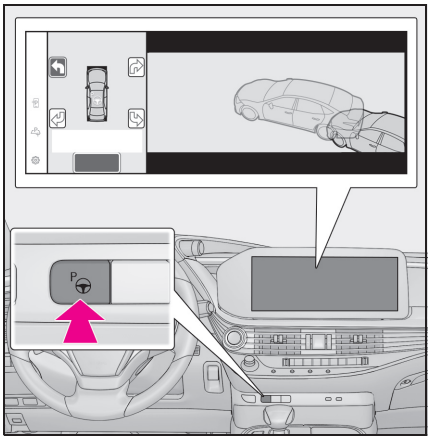
- If a detected parked vehicle is narrow or parked extremely close to the curb, the position at which assistance will park the vehicle will also be close to the curb. If it seems likely the vehicle will collide with something or drive off of the road, depress the brake pedal to stop the vehicle, and then press the Advance Park main switch to disable the system.

Advanced Park perpendicular exiting (forward/reverse) function

When exiting from a perpendicular parking space, if the system determines that exit is possible the perpendicular exiting (forward/reverse) function can be used. Also, depending on the surrounding environment, if it is necessary to change the direction of travel of the vehicle, the shift position can be changed by assistance control.

Leaving a parking space using the perpendicular exiting (forward/reverse) function

1 With the brake pedal depressed and P shift position selected, press the Advanced Park main switch and check that the exit direction selection screen is displayed on the Center Display.

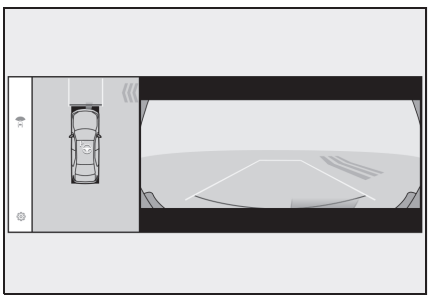


2 Select an arrow on the Center Display to select the direction you wish to exit.

If the turn signal lever is operated, only exit to the left or right can be selected.

3 Depress the brake pedal and select "Start" button.

A buzzer will sound, an operation message will be displayed on the multi-information display, and assistance will begin operating.



To cancel assistance, press the Advanced Park main switch.

If assistance is canceled, "Advanced Park Cancel" will be displayed.

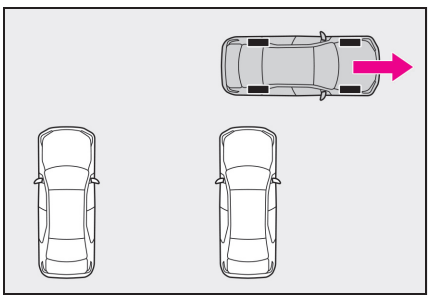
If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter: →P.310

4 Perform operations as indicated by the advice displays until the vehicle is in a position where exit is possible.

When the vehicle reaches a position where exit is possible, "You can exit by moving the steering wheel" will be displayed. If the steering wheel is operated, "Advanced Park Finished" will be displayed and assistance will end.

As assistance will end while the vehicle is moving, grip the steering wheel and drive forward.

If the steering wheel is not operated, the vehicle will stop at the exit position. Assistance can be ended by depressing the accelerator pedal or brake pedal.



■ **If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter**

→P.310

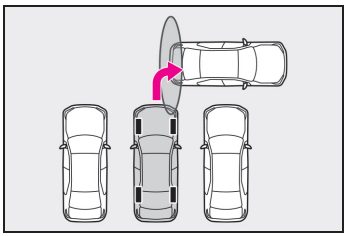
■ **Perpendicular exiting (forward/reverse) function**

Do not use exiting (forward/reverse) function in any situation other than when exiting a parallel parking spot. If assistance is started unintentionally, depress the brake pedal and stop the vehicle, then press the Advanced Park main switch to cancel assistance.

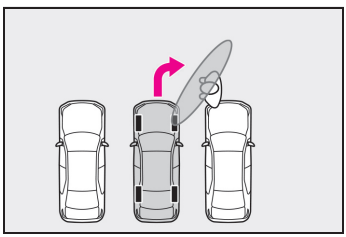
■ **Situations in which the perpendicular exiting (forward/reverse) function will not operate**

In situations such as the following, the perpendicular exiting (forward/reverse) function will not operate:

- When a vehicle which is waiting to park is in the exit direction



- When a wall, column, or person is detected as near a front or rear center or corner sensor



■ **When the brakes have been operated**

→P.310

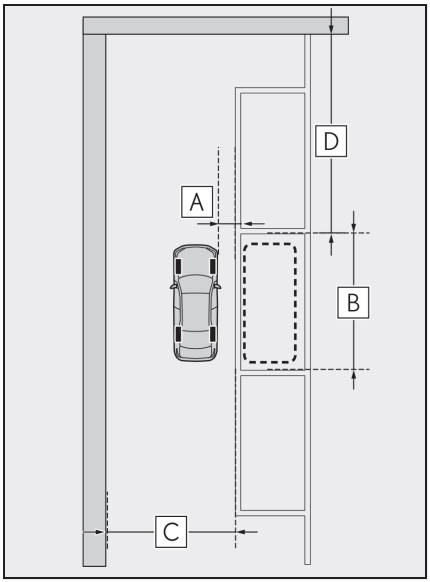
Advanced Park parallel parking function

The parallel parking function can be used if the target parking space can be detected when the vehicle is stopped close and aligned with the center of the parking space. Also, depending on the condition of the parking space, etc., if it is necessary to change the direction of travel of the vehicle, the shift position can be changed by assistance control.

Parking using the parallel parking function

1 Stop the vehicle with it aligned near the center of the target parking space.

▶ If there are parking space lines



A Approximately 3.3 ft. (1 m)*

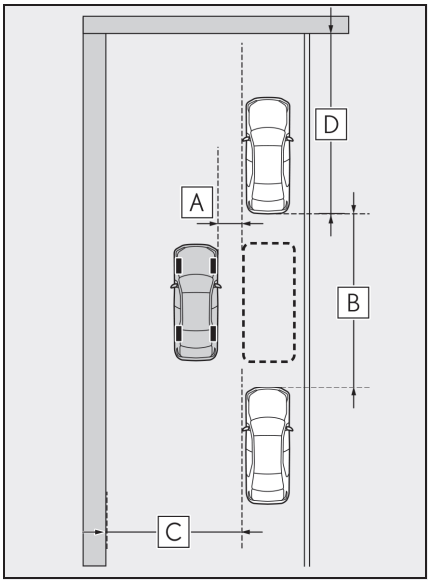
B Approximately 19.7 ft. (6 m)*

C Approximately 14.8 ft. (4.5 m) or more*

D Approximately 26.2 ft. (8 m) or more*

*: This is a reference measurement for detection of a parking space. Depending on the surrounding environment, detection may not be possible.

▶ If there is an adjacent parked vehicle



A Approximately 3.3 ft. (1 m)*

B Approximately 23.0 ft. (7 m)*

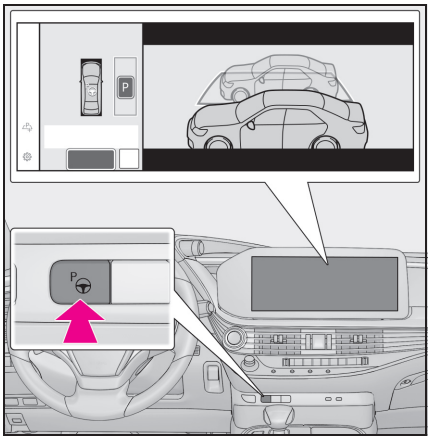
C Approximately 14.8 ft. (4.5 m) or more*

D Approximately 26.2 ft. (8 m) or more*

*: This is a reference measurement for detection of a parking space. Depending on the surrounding environment, detection may not be possible.

2 Press the Advanced Park main switch and check that a possible

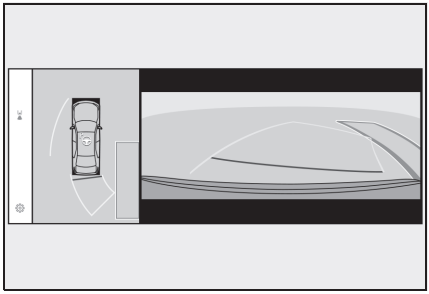
parking space is displayed on the Center Display.



- If a space which your vehicle can be parked is detected, a target parking space box will be displayed.
- If it is possible to perpendicular parking (forward/reverse) in the space, select the parking space, and then select to change to the perpendicular parking (forward/reverse) function.
- Depending on the surrounding environment, it may not be possible to use this function. According to the information displayed on the Center Display, use the function on another parking space.

3 Select "Start" button.

A buzzer will sound, an operation message will be displayed on the multi-information display, and assistance will begin operating.



- When the brake pedal is released, "Moving Forward..." will be displayed and the vehicle will begin moving forward.
- To cancel assistance, press the Advanced Park main switch.

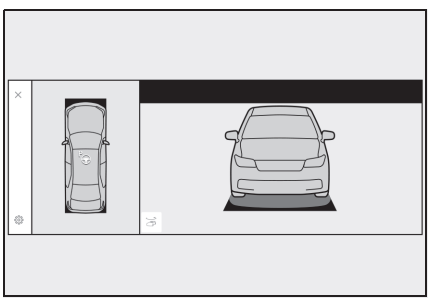
If assistance is canceled, "Advanced Park Cancel" will be displayed.

If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter:→P.310

4 Perform operations as indicated by the advice displays until the vehicle stops in the target parking space.

When the vehicle stops, "Advanced Park Finished" will be displayed and parking assistance will end.

If you select on the Center Display, the vehicle displayed on the parking assist completion screen will rotate.

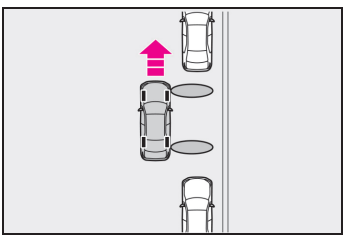


■ **If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter**

→P.310

■ **If "No available parking space" is displayed**

Even if the vehicle is stopped parallel to a parking space, an adjacent parked vehicle may not be detected. In this case, if the vehicle is moved to a position that a parked vehicle can be detected, assistance can be started.



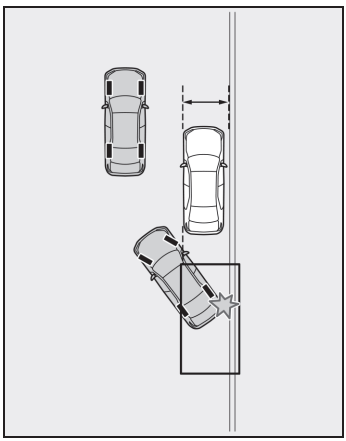
■ **When the brakes have been operated**

→P.310

NOTICE

■ **When using the parallel parking function**

- Make sure that there are no obstructions within the yellow guide lines and between the vehicle and target parking spot. If any obstructions are detected within the yellow guide lines or between the vehicle and the target parking space, the parallel parking function will be cancelled or suspended.
- As the target parking space will not be able to be set correctly if the surface of the parking space is on a slope or has differences in height, the vehicle may stray from the target parking space or be slanted. Therefore, do not use the parallel parking function for this kind of parking spot.
- If an adjacent parked vehicle is narrow or parked extremely close to the curb, the position at which assistance will park the vehicle will also be close to the curb. If it seems likely the vehicle will collide with the curb or drive off of the road, depress the brake pedal to stop the vehicle, and then press the Advanced Park main switch to disable the system.



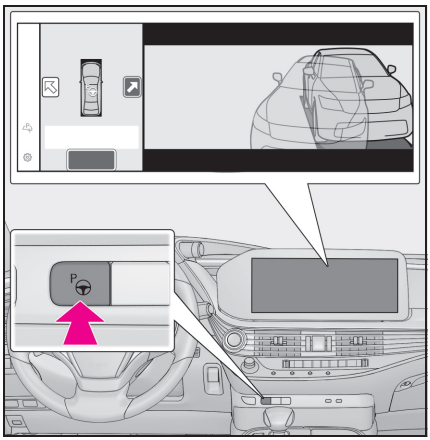
- If there is a wall or other barrier on the inner side of the parking space, the vehicle may stop at a position slightly outside of the set target parking space.

Advanced Park parallel exiting function

When exiting from a parallel parking space, if the system determines that exit is possible the parallel exiting function can be used. Also, depending on the surrounding environment, if it is necessary to change the direction of travel of the vehicle, the shift position can be changed by assistance control.

Leaving a parking space using the parallel exiting function

1 With the brake pedal depressed and P shift position selected, press the Advanced Park main switch and check that the exit direction selection screen is displayed on the Center Display.



2 Select an arrow on the Center Display to select the direction you wish to exit.

If the turn signal lever is operated, only exit to the left or right can be selected.

3 Depress the brake pedal and select "Start" button.

A buzzer will sound, an operation message will be displayed on the multi-information display, and assistance will begin operating.

To cancel assistance, press the Advanced Park main switch.

If assistance is canceled, "Advanced Park Cancel" will be displayed.

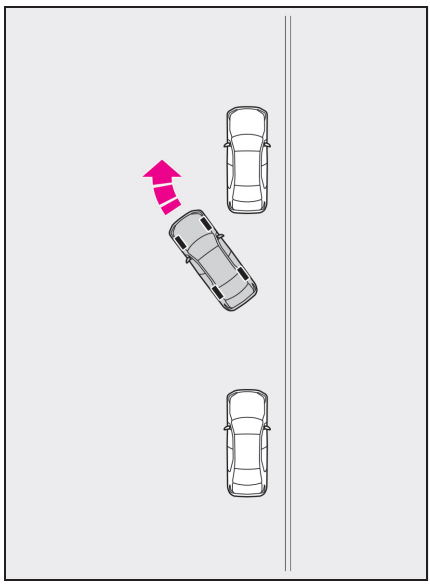
If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter: →P.310

4 Perform operations as indicated by the advice displays until the vehicle is in a position where exit is possible.

When the vehicle reaches a position where exit is possible, "You can exit by moving the steering wheel" will be displayed. If the steering wheel is operated, "Advanced Park Finished" will be displayed and assistance will end.

As assistance will end while the vehicle is moving, grip the steering wheel and drive forward.

If the steering wheel is not operated, the vehicle will stop at the exit position. Assistance can be ended by depressing the accelerator pedal or brake pedal.



■ **If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter**

→P.310

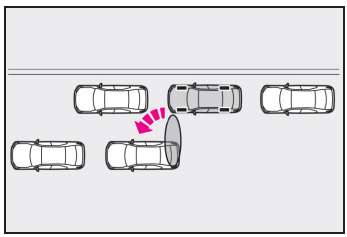
■ **Parallel exiting function**

Do not use parallel exiting function in any situation other than when exiting a parallel parking spot. If assistance is started unintentionally, depress the brake pedal and stop the vehicle, then press the Advanced Park main switch to cancel assistance.

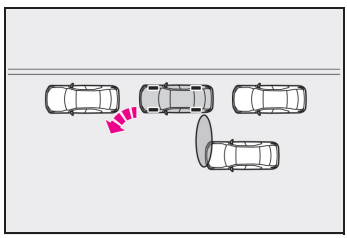
■ **Situations in which the parallel exiting function will not operate**

In situations such as the following, the parallel exiting function will not operate:

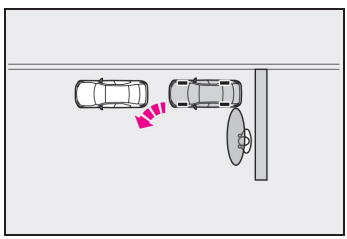
- When vehicles waiting at a traffic signal in the exit direction



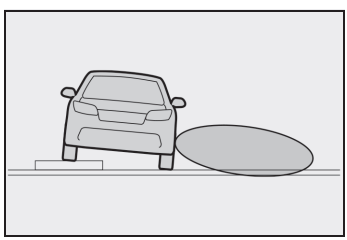
- When a vehicle is stopped in the area behind where the vehicle will exit



- When a wall, column, or person is detected as near a front or rear side sensor



- When the vehicle has been parked on a curb and a side sensor detects the road surface



- When a vehicle is not parked in front of the vehicle
- When there is excessive space between the front of the vehicle and a parked vehicle

■ **When the brakes have been operated**

→P.310

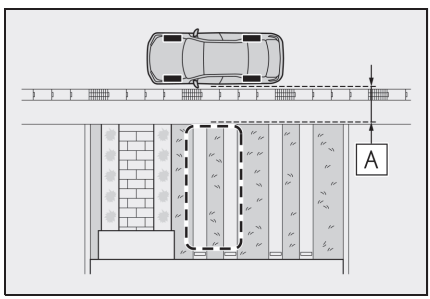
Advanced Park memory function

The memory function can be used to park in a previously registered parking space, even if there are no parking space lines or adjacent parked vehicles.

Up to 3 parking spaces can be registered.

Registering a parking space

1 Stop the vehicle with it aligned near the center of the target parking space.

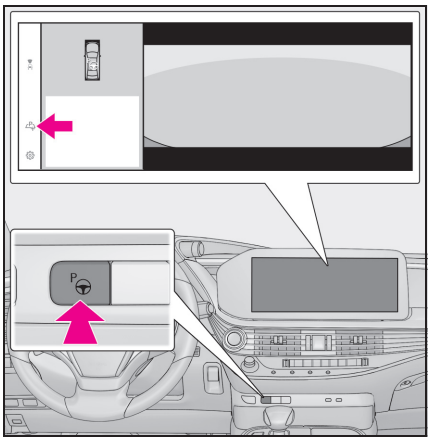


A Approximately 3.3 ft. (1 m)

2 Press the main switch and then select P+.

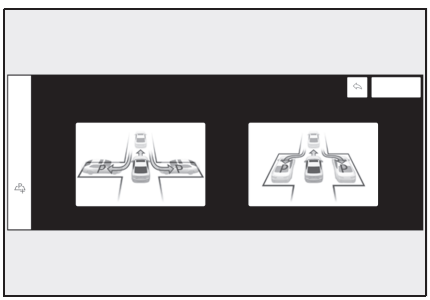
If the Advanced Park main switch is pressed at a parking space without parking lines or any adjacent parked vehicles, "No available parking space" may be displayed.

Continuously select and hold P.



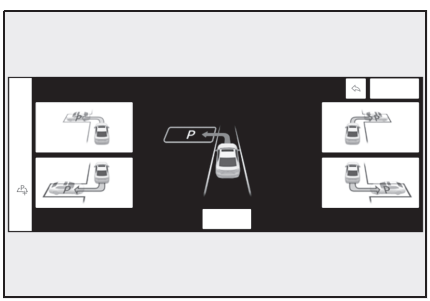
3 Select perpendicular parking (forward/reverse) function or parallel parking function.

Only parking spaces for which assist can be performed are displayed.

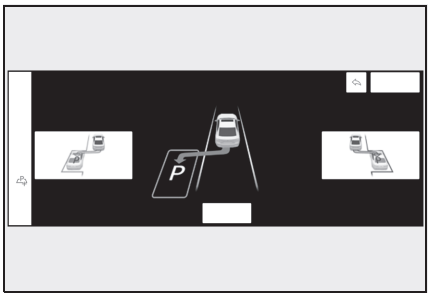


4 Select the parking direction.

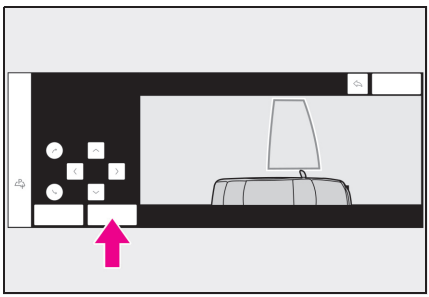
When perpendicular parking (forward/reverse) was selected in step 3:



When parallel parking was selected in step 3:



5 Using the arrow buttons, adjust the position of the parking space to be registered, and then select "OK" button.



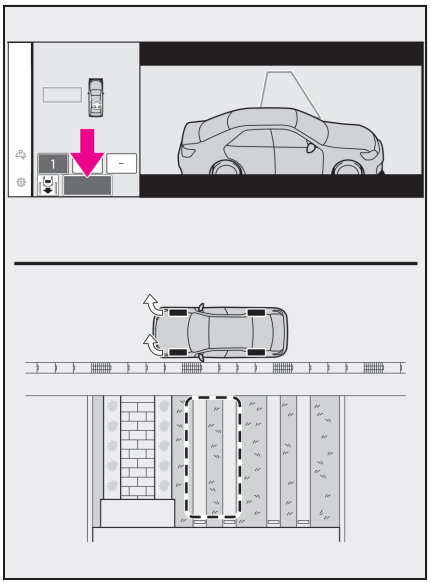
6 Select "Start" button.

A buzzer will sound, an operation message will be displayed on the multi-information display, and assistance will begin operating.

When the brake pedal is released, "Moving Forward..." will be displayed and the vehicle will begin moving forward.

If you feel that the vehicle is approaching close to a surrounding vehicle, object, per-

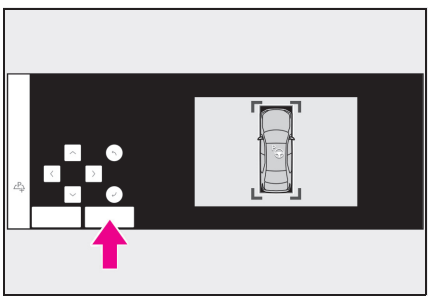
son, or gutter: →P.310



7 Perform operations as indicated by the advice displays until the vehicle stops in the target parking space.

8 Check the position that the vehicle has stopped. If necessary, adjust the position of the parking spot to be registered using the arrow buttons, and then select "Reg." button.

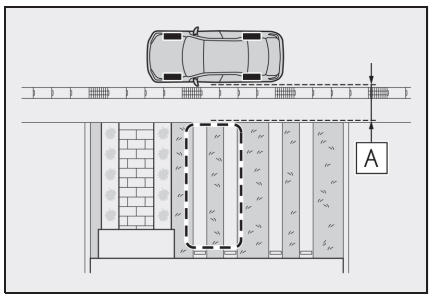
"Registration Completed" will be displayed on the Center Display.



- Register the parking space only if there are no obstructions within the area shown by the thick lines.
- The amount that the position of the parking spot to be registered can be adjusted is limited.

When parking in a parking space registered to the memory function

1 Stop the vehicle with it aligned near the center of the target parking space.

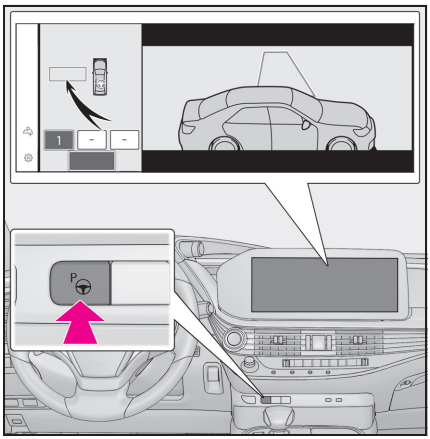


A Approximately 3.3 ft. (1 m)

2 Press the Advanced Park main switch and check that a possible parking space is displayed on the Center Display.

If the "MODE" button is displayed, the button can be touched to change between the memory function, perpendicular parking (forward/reverse) function and parallel

parking function.



3 Select the desired parking space, and then select "Start" button.

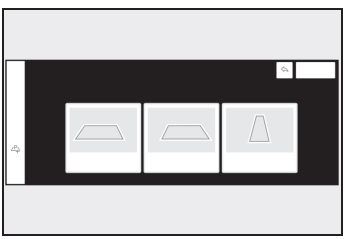
Perform the procedure for the perpendicular parking (forward/reverse) function from step **3**. (→P.308)

■ **If you feel that the vehicle is approaching close to a surrounding vehicle, object, person, or gutter**

→P.310

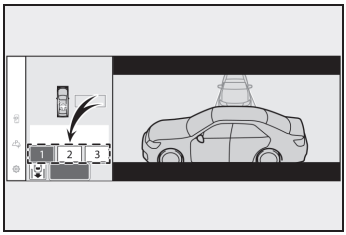
■ **When overwriting a registered parking space**

If the maximum number of parking spaces have been registered and is selected, a registered parking space can be selected and then overwritten with a new parking space.



■ **When multiple parking spaces are registered**

Select the desired parking space, and then select "Start" button.



■ **When the brakes have been operated**

→P.310

NOTICE

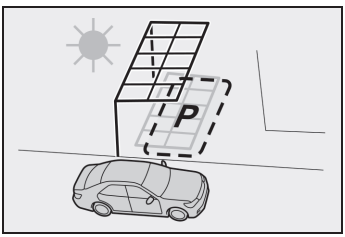
■ **When using the memory function (→P.310, 315)**

- The memory function is a function which provides assistance in parking in a previously registered parking space. If the condition of the road surface, vehicle, or surrounding area differs from when registration was performed, the parking space may not be able to be detected correctly or assistance may not be provided to the point that the vehicle is fully parked.
- Do not register a parking space in situations such as the following, as the set parking space may not be able to be registered or assistance may not be possible later.
  - When a camera lens is dirty or covered with water droplets
  - When it is raining or snowing
  - When the surrounding area is dark (at night, etc.)
- In situations such as the following, it may not be possible to register a parking space.
  - When there is insufficient space between the road and parking space
  - When the road surface around the parking space does not have any differences the system can recognize

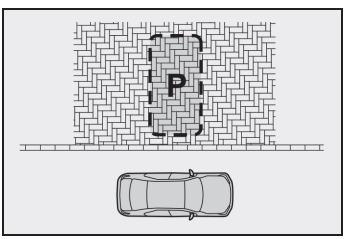
NOTICE

● If a parking space has been registered in situations such as the following, assistance may not be able to be started later or assistance to the registered position may not be possible.

- When shadows are cast on the parking space (there is a carport over the parking space, etc.)



- When there are leaves, garbage, or other objects which will likely move, in the parking space
- When the road surface around the parking space has the same repeating pattern (brick, etc.)



● In situations such as the following, it may not be possible for the system to provide assistance to a registered parking spot:

- When the appearance of the parking space is affected by the shadow of the vehicle or trees
- When an object is detected in the registered parking space
- When a pedestrian or passing vehicle is detected during assistance
- When the position the vehicle is stopped when assistance is started differs from the position when registration was performed
- When the registered parking space cannot be reached due to the existence of parking blocks, etc.
- When the road surface around the parking space has changed (road surface has degraded or been resurfaced)
- When the sunlight conditions differ from when registration was performed (due to weather or time of day)
- When the sun is shining directly into a camera, such as in the early morning or evening
- When the color or brightness of the road surface is uneven
- When a light is temporarily shined on the parking space (lights of another vehicle, security light, etc.)
- When the road surface around the parking space has the same repeating pattern
- When there is a low protrusion on the road surface near the parking space
- When the parking space is on a slope
- When a camera has been splashed by hot or cold water and the lens has fogged up
- When a camera lens is dirty or covered with water droplets
- When accessories which obstruct the view of the camera are installed

If assistance is ended during registration, perform registration again.

● When registering a parking space to the memory function, if the road surface cannot be detected “No available parking space to register” will be displayed.

NOTICE

- When using the memory function, make sure to stop immediately in front of the stop position. Otherwise the parking space may not be able to be detected correctly or assistance may not be provided to the point that the vehicle is fully parked.
- Do not use the memory function if a camera has been subjected to a strong impact or images of the panoramic view monitor are misaligned.
- If a camera has been replaced, as the installation angle of the camera will have changed, it will be necessary to reregister parking spaces of the memory function.

Advanced Park cancelation/suspension

Assistance will be canceled when

In situations such as the following, Advanced Park operation will be canceled. Firmly hold the steering wheel and depress the brake pedal to stop the vehicle.

As system operation has been canceled, begin the operation again or continue parking manually, using the steering wheel.

- The Advanced Park main switch is pushed
- The shift position has been changed to P
- The parking brake is engaged
- A door or the trunk is opened
- The driver's seat belt is unfastened
- The outside rear view mirrors are folded
- The TRAC or VSC is turned off
- The TRAC, VSC or ABS operates
- The engine switch is pressed
- The system determines assistance cannot be continued in the current parking environment
- The system malfunctions
- While the vehicle was stopped, "Cancel" was selected on the Center Display

Assistance will be suspended when

In situations such as the following, Advanced Park operation will be suspended.

Assistance can be started again by following the directions displayed on the Center Display.

Also, when assistance is suspended, if the shift position is changed twice with the brake pedal depressed, assistance will be canceled in that shift position.

However, if assistance is suspended by changing the shift position, assistance will be canceled if the shift position is changed once.

- The steering wheel is operated
- The accelerator pedal is depressed
- The shift position has been changed
- A moving object or stationary object that may collide with your vehicle has been detected, resulting in the operation of the engine output control/braking control.
- Camera switch is pressed

Changing the Advanced Park settings

Select ⚙ on the Center Display, and then select "Advanced Park".

■ Speed Profile

The vehicle speed for when assistance is performed can be set.

This setting cannot be changed when registering a parking space to the memory function.

■ Obstacle detection range

The distance from which obstacles will be avoided while assistance is being performed can be set.

■ Preferred parking method

The preferred parking direction displayed when at a parking space which perpendicular (forward/reverse) or parallel parking is possible can be set.

■ Preferred parking direction

The preferred parking direction displayed when it is possible to pull perpendicular forward or reverse into a parking space can be selected.

■ Preferred exit direction (perpendicular)

The preferred exit direction displayed when it is possible to pull forward or reverse to the left or right out of a parking space can be selected.

■ Preferred exit direction (parallel)

The preferred exit direction displayed when it is possible to exit to the left or right from a parallel parking space can be selected.

■ Camera view when parking

The display angle of the camera image when using the perpendicular parking (forward/reverse) function or parallel parking function can be set.

■ Camera view when exiting

The display angle of the camera image when using the perpendicular exiting (forward/reverse) function or parallel parking exit function can be set.

■ Parking path adjustment

The course for when parking assistance is operating can be adjusted inward or outward.

If the tires are worn, the path of vehicle may be offset from the center of the parking space. In this case, use this setting to adjust the parking course.

■ Road width adjustment

When parking assistance is started, the amount of lateral movement while the vehicle is moving forward can be adjusted.

■ Park position adjustment (forward)

The position at which perpendicular parking (forward) is completed can be adjusted. (Except when using the memory function.)

■ Park position adjustment (reverse)

The position at which perpendicular parking (reverse) is completed can be adjusted. (Except when using the memory function.)

■ Rear accessory setting

If an accessory, such as a trailer hitch, has been installed to the rear of the

vehicle, the length of the rear of the vehicle can be adjusted to help avoid colliding with objects to the rear of the vehicle.

■ Clear registered parking space

The parking spaces registered to the memory function can be deleted. Parking space information cannot be deleted when assistance is being performed or when registering parking space information to the memory function.

NOTICE

- Take care when using the park position adjustment (forward) or park position adjustment (reverse) for adjusting because the vehicle may collide with parking blocks, curb stones, or other low objects.
- If it is likely that your vehicle will collide with a nearby vehicle/object, parking block, curb stone, etc., depress the brake pedal to stop the vehicle and press the Advanced Park main switch to disable the system.

Advanced Park displayed messages

The operating state, assistance operation, etc. of the Advanced Park is displayed on the Center Display. If a message is displayed, respond according to the content displayed.

■ If "No available parking space" is displayed

Move the vehicle to a location where a parking space or parking lines can be detected.

■ If "Unavailable in current condition" is displayed

Move the vehicle to another location and use the system.

■ If "Not enough space to exit" is displayed

The parallel parking exit function cannot be used due to a situation such as the distance between your vehicle and vehicles parked in front of and behind your vehicle being short, the existence of an object in the exit direction, etc.

Check the conditions of the area around your vehicle and exit from the parking space manually.

■ If "Cannot control speed" is displayed

The system judged that it cannot adjust the speed of the vehicle when using the system in an area with a slope or step and assistance was canceled.

Use the system in a level location.

■ If "Obstacle detected" is displayed

As a moving object or stationary object that may collide with your vehicle has been detected, the engine output control/braking control operates to suspend Advanced Park assistance.

Check the condition of the surrounding area. To resume assistance, select the "Start" button on the Center Display.

■ If "No available parking space to register" is displayed

This message is displayed when  is selected at a parking space that cannot be detected.

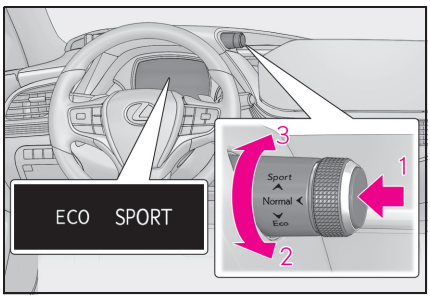
Operate the system at a parking space where differences in the road surface can be recognized. (→P.317)

Driving mode select switch

The driving modes can be selected to suit driving condition.

Selecting a drive mode

▶ Vehicles without Adaptive Variable Suspension System



1 Normal mode

Provides an optimal balance of fuel economy, quietness, and dynamic performance. Suitable for city driving.

Press the switch to change the driving mode to normal mode when not in normal mode.

2 Eco drive mode

Helps the driver accelerate in an eco-friendly manner and improve fuel economy through moderate throttle characteristics and by controlling the operation of the air conditioning system (heating/cooling).

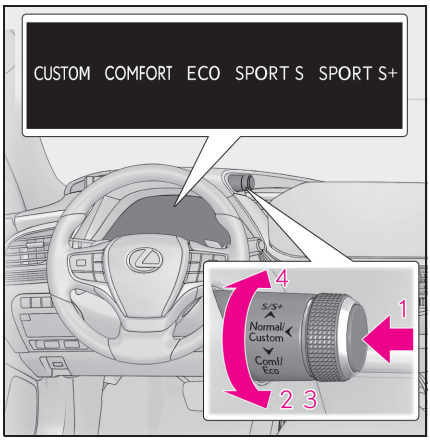
When not in Eco drive mode, if the driving mode select switch is turned backward, the Eco drive mode indicator will come on.

3 Sport mode

Controls the transmission and engine to provide quick, powerful acceleration. This mode also changes the steering feel, making it suitable for when agile driving response is desired, such as when driving on roads with many curves.

When not in sport mode, if the driving mode select switch is turned forward, the sport mode indicator will comes on.

▶ Vehicles with Adaptive Variable Suspension System



1 Normal mode/Custom mode

Normal mode and custom mode are selected by pressing the driving mode select switch. Each time the switch is pressed, the driving mode changes between normal mode and custom mode.

When normal mode is selected, the normal mode indicator comes on.
When custom mode is selected, the custom mode indicator comes on.

Press the switch to change the driving mode to normal mode when not in normal mode.

• Normal mode

Provides an optimal balance of fuel economy, quietness, and dynamic performance. Suitable for city driving.

When the shift position is in D, an appropriate gear for sporty driving may automatically be selected according to driver performance and driving conditions.

• Custom mode

Allows you to drive with the power train, steering, suspensions and air conditioning system functions set to your preferred settings.
Custom mode settings can only be changed on the drive mode customization display of the Center Display. (→P.510)

2 Comfort mode

By controlling the suspension, riding comfort is further enhanced. Suitable for city driving.

When not in comfort mode and the driving mode select switch is turned backward, the comfort mode indicator comes on.

3 Eco drive mode

Helps the driver accelerate in an eco-friendly manner and improve fuel economy through moderate throttle characteristics and by controlling the operation of the air conditioning system (heating/cooling).

When in comfort mode, if the driving mode select switch is turned backward, the Eco drive mode indicator comes on.

4 Sport mode

- Sport S mode

Controls the transmission and engine to provide quick, powerful acceleration. This mode is suitable for when agile driving response is desired, such as when driving on roads with many curves.

When not in Sport S mode, if the driving mode select switch is turned forward, the Sport S mode indicator comes on.

- Sport S+ mode

Helps to ensure steering performance and driving stability by simultaneously controlling the steering and suspension in addition to the transmission and engine. Suitable for sportier driving.

When in Sport S mode, if the driving mode select switch is turned forward, the Sport S+ mode indicator comes on.

■ If the driving mode select switch is operated while the opening screen is being displayed

If the driving mode select switch is operated while the opening screen is being displayed, the driving mode will be changed and the meter display will change accordingly after the opening screen operation has completed.

■ Operation of the air conditioning system in Eco drive mode

Eco drive mode controls the heating/cooling operations and fan speed of the air conditioning system to enhance fuel efficiency. To improve air conditioning performance, perform the following operations:

- Turn off eco air conditioning mode (→P.348)
- Adjust the fan speed (→P.344)
- Turn off Eco drive mode

■ Automatic deactivation of sport mode and custom mode

If the engine switch is turned off after driving in sport mode or custom mode, the drive mode will be changed to normal mode.

Electronically modulated air suspension*

*: If equipped

The height of the vehicle when driving can be selected using the vehicle height adjustment switch. The selected height level will be maintained regardless of the number of passengers or weight of cargo.

Additionally, settings of the following functions can be changed:

- Enabling/Disabling controls of access mode
- Temporarily disabling vehicle height control

Situations in which the vehicle height control may not operate properly

- In the following situations, the vehicle height may change slowly or may not change to the correct height:
  - When the vehicle comes into contact with snow, ice, stone, etc.
  - When the ambient temperature is low
  - When the accumulator tank pressure is low
- In the following situations, the vehicle height may not change:
  - If the hood or trunk is not fully closed
  - If the brake pedal depressed and the vehicle is stopped
  - When the vehicle is on a significantly uneven or undulating road
  - When the vehicle is on a slanted road or a slope

Operating sound of the air suspension compressor and valves

In the following situations the air suspension compressor and valves may operate and a sound may be heard, but this does not indicate a malfunction.

- When passengers enter or exit the vehicle or cargo is loaded or unloaded, causing the vehicle height to change
- When the height of the vehicle is changed using the vehicle height adjustment switch
- When the doors are opened/closed
- When the doors are locked/unlocked

When the accumulator tank pressure is low

When the accumulator tank pressure is low, the air suspension compressor and valves may operate repeatedly even though the vehicle height is not being changed. This does not indicate a malfunction.

When "Air Suspension System Malfunction Visit Your Dealer" is displayed on the multi-information display

The system may not operate properly. Have the vehicle inspected by your Lexus dealer.

Customization

Some functions can be customized. (→P.510)

WARNING

Precautions for the electronically modulated air suspension

- Even if the engine is not running, the vehicle height may change through vehicle height control. Be sure to keep your hands and feet away from the area underneath the vehicle and between the tires and vehicle body. Otherwise part of your body may get caught, possibly causing an injury.
- In situations such as the following, make sure to disable all functions of the vehicle height control of the electronically modulated air suspension. Otherwise, the vehicle height may change and part or your body may be caught under the vehicle, possibly causing injury.
  - When the vehicle is parked on a curb
  - If any of the wheels is not touching the ground

WARNING

- If the vehicle needs to be jacked up
- If the vehicle is to be tied down
- If the vehicle is to be towed

NOTICE

■ **Parking precaution**

- If the vehicle is parked for a long time, the vehicle height may change due to changes in the ambient temperature. When parking the vehicle, make sure that the area above and below the vehicle is clear, so that the vehicle will not contact anything if its height changes.
- Be careful when parking the vehicle in an area with a low ceiling or near low hanging objects, as the vehicle height will increase when passengers exit the vehicle and exit control of access mode operates.
- When the doors are closed or locked, the vehicle height may decrease. When parking in a parking lot with a device which raises to contact the bottom of the vehicle, make sure to disable the vehicle height control.

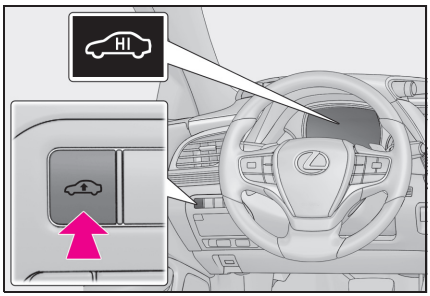
Selecting the vehicle height

To adjust the vehicle height to one appropriate for road and driving conditions, press the vehicle height adjustment switch.

Turns high mode on/off.

When high mode is enabled, the high mode indicator on the meter will illuminate. The vehicle height will increase by approximately 0.8 in. (20 mm) from its normal position.

When the vehicle height is increased by a control of access mode press the vehicle height adjustment switch twice to enable/disable high mode.



■ **The vehicle height adjustment switch can be used to change the mode when**

The engine switch is in IGNITION ON mode.

■ **System protection function**

If the vehicle height is repeatedly increased and decreased using the vehicle height adjustment switch, etc., the system may not operate temporarily.

WARNING

■ **When operating the vehicle height adjustment switch**

When operating the vehicle height adjustment switch, make sure to check the safety of the area around the vehicle, as the vehicle height may change and part of someone's body may be caught under the vehicle, possibly causing injury.

Vehicle height control when entering/exiting the vehicle (Access Mode)

In order to improve the ease of entering and exiting the vehicle, the vehicle height will automatically increase when the P shift position is selected and a door is opened.

When any of the following conditions are met, the vehicle will return to its

previous height:

- A certain amount of time has elapsed since the doors were closed
- The vehicle speed reaches approximately 3 mph (5 km/h)
- The doors are locked using the smart access system with push-button start or wireless remote control

■ **Enabling/Disabling access mode**

1 Select ⚙ on the center display.
2 Select "Vehicle customize".
3 Select "Height control".
4 Select ◉ (ON)/ ○ (OFF) on "Access mode".

The setting will change between enabled/disabled each time ◉ / ○ switch is pressed.

■ **When the vehicle height has been increased by a control of access mode**

Press the vehicle height adjustment switch with the engine switch in any mode to return the vehicle to its previous vehicle height.

■ **Access mode operation**

- Access mode will not operate if the vehicle is not parked on a level road surface.
- Depending on the current vehicle height, access mode may not operate.
- After the doors are unlocked, if access mode operates, the vehicle height will increase by approximately 0.8 in. (20 mm) from its normal position. After the vehicle has been driven, if access mode operates, the vehicle height will increase by approximately 0.4 in. (10 mm) from its normal position.
- If the doors are opened and closed repeatedly, the system may not operate temporarily.

Temporarily disabling vehicle height control

Vehicle height control can be temporarily disabled.

When to temporarily disable vehicle height control:→P.327

1 Select ⚙ on the center display.
2 Select "Vehicle customize".
3 Select "Height control".
4 Select ◉ (ON)/ ○ (OFF) on "Vehicle height control".

This setting is memorized even if the engine switch is turned off.

Even if the vehicle height control functions are disabled, they will be enabled automatically when the vehicle speed reaches approximately 19 mph (30 km/h).

Driving assist systems

To keep driving safety and performance, the following systems operate automatically in response to various driving situations. Be aware, however, that these systems are supplementary and should not be relied upon too heavily when operating the vehicle.

Summary of the driving assist systems

■ **ABS (Anti-lock Brake System)**

Helps to prevent wheel lock when the brakes are applied suddenly, or if the brakes are applied while driving on a slippery road surface

■ **Brake assist**

Generates an increased level of braking force after the brake pedal is depressed when the system detects a panic stop situation

■ **VSC (Vehicle Stability Control)**

Helps the driver to control skidding when swerving suddenly or turning on slippery road surfaces.

■ **TRAC (Traction Control)**

Helps to maintain drive power and prevent the drive wheels from spinning when starting the vehicle or accelerating on slippery roads

■ **Hill-start assist control**

Helps to reduce the backward movement of the vehicle when starting on an uphill

■ **DRS (Dynamic Rear Steering) (if equipped)**

Contributes to the turning characteristics and responsiveness of the vehicle by adjusting the rear wheel angle of the vehicle in accordance with steering wheel movement.

■ **EPS (Electric Power Steering)**

Employs an electric motor to reduce the amount of effort needed to turn the steering wheel.

■ **Adaptive Variable Suspension System (if equipped)**

By independently controlling the damping force of the shock absorbers for each of the 4 wheels according to the road and driving conditions, this system helps riding comfort with superior vehicle stability, and helps good vehicle posture.
Also, the damping force changes depending on the selected driving mode. (→P.325)

■ **VDIM (Vehicle Dynamics Integrated Management)**

Provides integrated control of the ABS, brake assist, TRAC, VSC, hill-start assist control, EPS, DRS and Adaptive Variable Suspension System (if equipped)
Helps to maintain vehicle stability when swerving on slippery road surfaces by controlling the brakes, engine output, steering assist, and tire angle

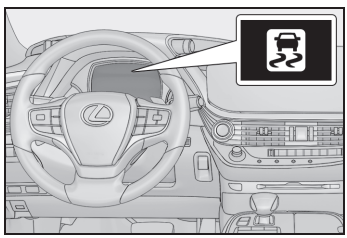
■ **The Secondary Collision Brake**

When the SRS airbag sensor detects a collision and the system operates, the

brakes and stop lights are automatically controlled to reduce the vehicle speed and help reduce the possibility of further damage due to a secondary collision.

When the TRAC/VSC/ABS/DRS* systems are operating

The slip indicator light will flash while the TRAC/VSC/ABS/DRS* systems are operating.



*: Only when DRS is operated in line with VDIM

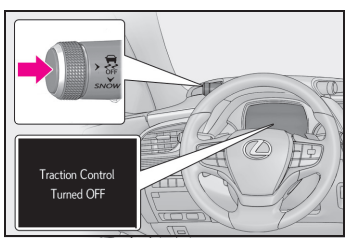
Disabling the TRAC system

If the vehicle gets stuck in mud, dirt or snow, the TRAC system may reduce power from the engine to the wheels. Pressing the OFF switch to turn the system off may make it easier for you to rock the vehicle in order to free it.

To turn the TRAC system off, quickly press and release the OFF switch.

The "Traction Control Turned OFF" will be shown on the multi-information display.

Press the OFF switch again to turn the system back on.



Turning off both TRAC and VSC systems

To turn the TRAC and VSC systems off, press and hold the OFF switch for more than 3 seconds while the vehicle is stopped.

The VSC OFF indicator light will come on and the "Traction Control Turned OFF" will be shown on the multi-information display.*

Press the OFF switch again to turn the system back on.

*: On vehicles with PCS (Pre-Collision System), PCS will also be disabled (only Pre-Collision warning is available). The PCS warning light will come on and a message will be displayed on the multi-information display. (→P.211)

When the message is displayed on the multi-information display showing that TRAC has been disabled even if the OFF switch has not been pressed

TRAC is temporary deactivated. If the information continues to show, contact your Lexus dealer.

Operating conditions of hill-start assist control

When the following four conditions are met, the hill-start assist control will operate:

- The shift position is in a position other than P or N (when stating off forward/backward on an upward incline)
- The vehicle is stopped
- The accelerator pedal is not depressed
- The parking brake is not engaged
- Engine switch is turned to IGNITION ON mode

Automatic system cancelation of hill-start assist control

The hill-start assist control will turn off in any of the following situations:

- Shift the shift position to P or N
- The accelerator pedal is depressed
- The brake pedal is depressed and the

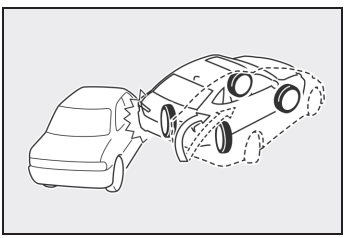
parking brake is engaged

- 2 seconds at maximum elapsed after the brake pedal is released
- Engine switch is turned off

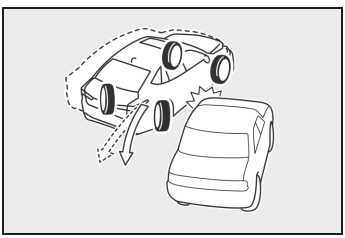
Turning path when DRS operates (if equipped)

Turning radius of the vehicle is reduced by steering the rear wheels in the opposite direction from the front wheels at low speeds. At this time, the rear wheels pass outside in case of moving forward or inside in case of reversing than the vehicle without the DRS system. Therefore, take care also to observe the rear of the vehicle when moving forward or the side of the vehicle when reversing in narrow spaces such as parking lots.

▶ When moving forward



▶ When reversing



DRS is disabled when (if equipped)

DRS may stop operating in the following situations.In this case, the minimum turning radius becomes larger than when the DRS system operates.

- When the steering wheel is operated for an extended period of time while the vehicle is moving very slowly
- When the vehicle is started and stopped repeatedly in a short period of time with the steering wheel operated

The system will restart after these situations have passed.

- When the battery terminals are disconnected and reconnected

The system will restart when the vehicle has been driven for a certain amount of time after the battery terminals are connected.

Sounds and vibrations caused by the ABS, brake assist, VSC, TRAC and hill-start assist control systems

- A sound may be heard from the engine compartment when the brake pedal is depressed repeatedly, when the engine is started or just after the vehicle begins to move. This sound does not indicate that a malfunction has occurred in any of these systems.
- Any of the following conditions may occur when the above systems are operating. None of these indicates that a malfunction has occurred.
  - Vibrations may be felt through the vehicle body and steering.
  - A motor sound may be heard also after the vehicle comes to a stop.
  - The brake pedal may pulsate slightly after the ABS is activated.
  - The brake pedal may move down slightly after the ABS is activated.

Automatic reactivation of TRAC and VSC systems

After turning the TRAC and VSC systems off, the systems will be automatically re-enabled in the following situations:

- When the engine switch is turned off
- If only the TRAC system is turned off, the TRAC will turn on when vehicle speed increases
  If both the TRAC and VSC systems are turned off, automatic re-enabling will not occur when vehicle speed increases.

Reduced effectiveness of the EPS system

The effectiveness of the EPS system is reduced to prevent the system from overheating when there is frequent steering input over an extended period of time. The steering wheel may feel heavy as a result. Should this occur, refrain from excessive steering input or stop the vehicle and turn

the engine off. The EPS system should return to normal within 10 minutes.

The system operates when the SRS airbag sensor detects a collision while the vehicle is in motion. However, the system does not operate in any of the following situations.

- When driving at a low speed
- Components are damaged

■ Secondary Collision Brake operating conditions

The system operates when the SRS airbag sensor detects a collision while the vehicle is in motion. However, the system does not operate when the components are damaged.

The system is automatically canceled in any of the following situations.

- The vehicle speed has decreased to a certain speed
- A certain amount of time elapses during operation
- The accelerator pedal is depressed a large amount

■ Secondary Collision Brake automatic cancellation

The system is automatically canceled in any of the following situations.

- The vehicle speed drops to approximately 0 km/h (0 mph).
- A certain amount of time elapses during operation
- The accelerator pedal is depressed a large amount

■ When "DRS Malfunction Visit Your Dealer" is displayed on the multi-information display

DRS may not operate properly. At this time, the minimum turning radius may become larger than when the DRS system operates properly or the vehicle may go straight with the steering wheel turned. Have the vehicle inspected by your Lexus dealer.

⚠ WARNING

■ The ABS does not operate effectively when

- The limits of tire gripping performance have been exceeded (such as excessively worn tires on a snow covered road).
- The vehicle hydroplanes while driving at high speed on wet or slick roads.

■ Stopping distance when the ABS is operating may exceed that of normal conditions

The ABS is not designed to shorten the vehicle's stopping distance. Always maintain a safe distance from the vehicle in front of you, especially in the following situations:

- When driving on dirt, gravel or snow-covered roads
- When driving with tire chains
- When driving over bumps in the road
- When driving over roads with potholes or uneven surfaces

■ TRAC/VSC may not operate effectively when

Directional control and power may not be achievable while driving on slippery road surfaces, even if the TRAC/VSC system is operating. Drive the vehicle carefully in conditions where stability and power may be lost.

■ Hill-start assist control does not operate effectively when

- Do not overly rely on hill-start assist control. Hill-start assist control may not operate effectively on steep inclines and roads covered with ice.

WARNING

- Unlike the parking brake, hill-start assist control is not intended to hold the vehicle stationary for an extended period of time. Do not attempt to use hill-start assist control to hold the vehicle on an incline, as doing so may lead to an accident.

When the TRAC/VSC is activated

The slip indicator light flashes. Always drive carefully. Reckless driving may cause an accident. Exercise particular care when the indicator light flashes.

When the TRAC/VSC systems are turned off

Be especially careful and drive at a speed appropriate to the road conditions. As these are the systems to help ensure vehicle stability and driving force, do not turn the TRAC/VSC systems off unless necessary.

Replacing tires

Make sure that all tires are of the specified size, brand, tread pattern and total load capacity. In addition, make sure that the tires are inflated to the recommended tire inflation pressure level.

The ABS, TRAC and VSC systems will not function correctly if different tires are installed on the vehicle.
Contact your Lexus dealer for further information when replacing tires or wheels.

Handling of tires and the suspension

Using tires with any kind of problem or modifying the suspension will affect the driving assist systems, and may cause a system to malfunction.

Secondary Collision Brake

Do not rely solely upon the Secondary Collision Brake. This system is designed to help reduce the possibility of further damage due to a secondary collision, however, that effect changes according to various conditions. Overly relying on the system may result in death or serious injury.

Winter driving tips

Carry out the necessary preparations and inspections before driving the vehicle in winter. Always drive the vehicle in a manner appropriate to the prevailing weather conditions.

Preparation for winter

- Use fluids that are appropriate to the prevailing outside temperatures.
  - Engine oil
  - Engine coolant
  - Washer fluid
- Have a service technician inspect the condition of the battery.
- Have the vehicle fitted with four snow tires or purchase a set of tire chains for the rear tires.*

Ensure that all tires are the specified size and brand, and that chains match the size of the tires.

*: Tire chains cannot be mounted on vehicles with front and rear tires of differing sizes.

WARNING

■ Driving with snow tires

Observe the following precautions to reduce the risk of accidents.
Failure to do so may result in a loss of vehicle control and cause death or serious injury.

- Use tires of the specified size.
- Maintain the recommended level of air pressure.
- Do not drive in excess of 75 mph (120 km/h), regardless of the type of snow tires being used.
- Use snow tires on all, not just some wheels.

■ When installing tire chains

Before installing tire chains, make sure to disable all functions of the vehicle height control of the electronically modulated air suspension. Otherwise, the vehicle height may change while installing the tire chains and part or your body may be caught under the vehicle, possibly causing injury. (→P.329)

■ Driving with tire chains

Observe the following precautions to reduce the risk of accidents.
Failure to do so may result in the vehicle being unable to be driven safely, and may cause death or serious injury.

- Do not drive in excess of the speed limit specified for the tire chains being used, or 30 mph (50 km/h), whichever is lower.
- Avoid driving on bumpy road surfaces or over potholes.
- Avoid sudden acceleration, abrupt steering, sudden braking and shifting operations that cause sudden engine braking.
- Slow down sufficiently before entering a curve to ensure that vehicle control is maintained.
- Do not use LTA (Lane Tracing Assist) system.

NOTICE

■ Repairing or replacing snow tires

Request repairs or replacement of snow tires from Lexus dealers or legitimate tire retailers.
This is because the removal and attachment of snow tires affects the operation of the tire pressure warning valves and transmitters.

Before driving the vehicle

Perform the following according to the driving conditions:

- Do not try to forcibly open a window or move a wiper that is frozen. Pour warm water over the frozen area to melt the ice. Wipe away the water immediately to prevent it from freezing.
- To ensure proper operation of the climate control system fan, remove any snow that has accumulated on the air inlet vents in front of the windshield.
- Check for and remove any excess ice or snow that may have accumulated on the exterior lights, outside rear view mirrors, windows, vehicle's roof, chassis, around the tires or on the brakes.
- Remove any snow or mud from the bottom of your shoes before getting in the vehicle.

When driving the vehicle

Accelerate the vehicle slowly, keep a safe distance between you and the vehicle ahead, and drive at a reduced speed suitable to road conditions.

When parking the vehicle

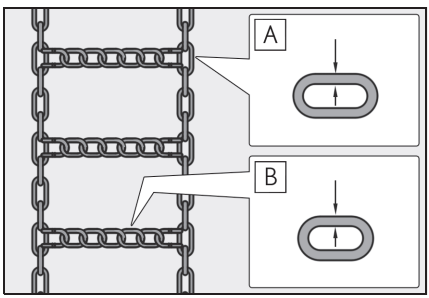
Park the vehicle and shift the shift position to P without setting the parking brake. The parking brake may freeze up, preventing it from being released. If the vehicle is parked without setting the parking brake, make sure to block the wheels.

Failure to do so may be dangerous because it may cause the vehicle to move unexpectedly, possibly leading to an accident.

Selecting tire chains

▶ Vehicles with front and rear tires of the same size

Use the correct tire chain size when mounting the tire chains.
Chain size is regulated for each tire size.



A Side chain (0.12 in. [3 mm] in diameter)

B Cross chain (0.16 in. [4 mm] in diameter)

▶ Vehicles with front and rear tires of differing sizes

Tire chains cannot be mounted.

Snow tires should be used instead.

Regulations on the use of tire chains

Regulations regarding the use of tire chains vary depending on location and type of road. Always check local regulations before installing chains.

■ Tire chain installation

Observe the following precautions when installing and removing chains:

- Install and remove tire chains in a safe location.
- Install tire chains on the rear tires. Do not install tire chains on the front tires.
- Install tire chains on the rear tires as tightly as possible. Retighten chains after driving 1/4—1/2 mile (0.5—1.0 km).
- Install tire chains following the instructions provided with the tire chains.

NOTICE

■ Fitting tire chains

The tire pressure warning valves and transmitters may not function correctly when tire chains are fitted.

Windshield wipers

To enable the windshield wipers to be lifted when heavy snow or icy conditions are expected, change the rest position of the windshield wipers from the retracted position below the hood to the service position using the wiper lever. (→P.190)

5-1. Rear Multi Operation Panel

Rear Multi Operation Panel 340

5-2. Lexus Climate Concierge

Lexus Climate Concierge..... 343

5-3. Using the air conditioning system and defogger

Front automatic air conditioning system 344

Rear automatic air conditioning system 352

Heated steering wheel/seat heaters/seat ventilators..... 355

5-4. Using the interior lights

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5-5. Using the storage features

List of storage features..... 363

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5-6. Using the other interior features

Other interior features 371

Garage door opener..... 385

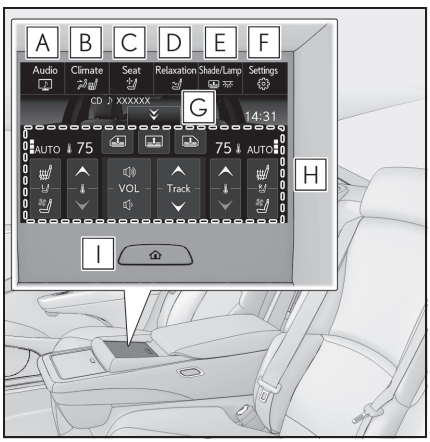
Rear Multi Operation Panel*

*: If equipped

The Rear Multi Operation Panel built-into the rear armrest can be used to operate the audio system, air conditioning system, seat, relaxation seat, shades or lights.

Rear Multi Operation Panel overview

■ Home screen



A Touch to display the audio control screen.

Refer to "MULTIMEDIA OWNER'S MANUAL".

B Touch to display the rear air conditioning control screen.

→P.352, 356

C Touch to display the rear seat adjustment screen.

→P.120, 128, 130

D Touch to display the relaxation seat (if equipped) control screen.

→P.122

E Touch to display the electronic rear roof sunshade (if equipped)/rear sunshade/rear interior light control screen.

→P.151, P.360, 381

F Touch to display the Rear Multi Operation Panel settings screen.

→P.340

G Touch to display/hide the shortcut screen.

H Shortcut screen

The following can be adjusted or operated:

- Rear air conditioning system temperature setting

→P.352

- Rear seat heaters/rear seat ventilators

→P.356

- Audio system

Refer to "MULTIMEDIA OWNER'S MANUAL".

- Rear door sunshades/rear quarter sunshades/rear sunshade

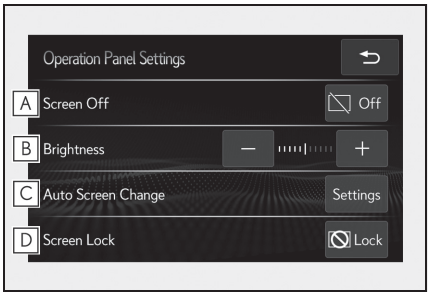
→P.382

I  button

Press to display the home screen. When the screen is on, press and hold to turn the screen off.

■ Rear Multi Operation Panel settings screen

Screen operation settings and the brightness of the screen can be changed.



A Touch to turn the screen off.

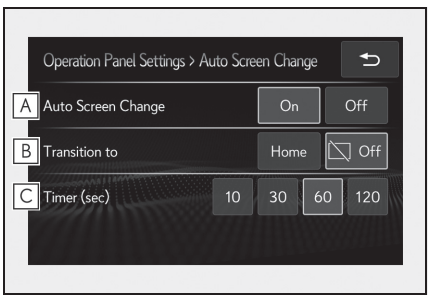
Press the button to display the home screen.

B Touch to adjust the brightness of the screen.

C Touch to display the automatic screen transition settings screen.

D Touch to lock the Rear Multi Operation Panel.

Auto screen change settings screen



A Touch to turn the automatic screen transition function on/off.

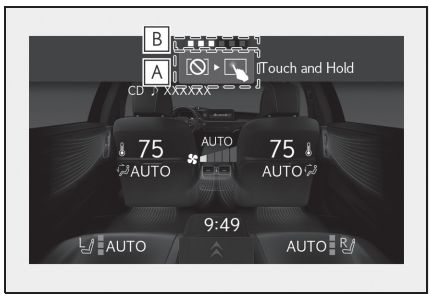
B Touch to set whether the screen will transition to the home screen or turn off when the automatic screen transition function operates.

C Touch to set the amount of time (10/30/60/120 seconds) the Rear Multi Operation Panel must be idle before the automatic screen transition function operates.

When the screen is off, press the button to turn the screen on and display the previously displayed screen. Press again to display the home screen.

Unlocking the Rear Multi Operation Panel

Touch and hold A until the unlock status indicators (B) are completely illuminated to unlock the Rear Multi Operation Panel.



Operating the Rear Multi Operation Panel

- When operating the Rear Multi Operation Panel, only use the tip of a finger. The Rear Multi Operation Panel cannot be operated with a fingernail, pen, etc.
- Use only one finger when operating the Rear Multi Operation Panel. The Rear Multi Operation Panel cannot be operated with multiple fingers.
- When the engine switch is changed to ACCESSORY or IGNITION ON mode, if a hand object, liquid or foreign matter is touching the Rear Multi Operation Panel, it may not operate correctly. In this case, remove anything touching the Rear Multi Operation Panel and wait for approximately 30 seconds before operating it again.
  If the Rear Multi Operation Panel still cannot be operated normally, press and

hold the  button to turn the Rear Multi Operation Panel off, and then press the  button again to turn it back on and operate it.

- In the following situations, the Rear Multi Operation Panel may not operate properly:
  - If wearing gloves during operation, non response may occur.
  - If a wet hand is used to operate the Rear Multi Operation Panel.
  - If a screen cover or coating is applied to on the Rear Multi Operation Panel.
  - If the Rear Multi Operation Panel is dirty or has liquid attached to it, incorrect operation or non-response may occur.
  - If the Rear Multi Operation Panel receives electro magnetic waves, incorrect operation or non-response may occur.
  - If a mobile phone or other wireless communication device brought near the Rear Multi Operation Panel.
- If the a metal object, such as the following, is touching or covering the Rear Multi Operation Panel:
  - Coins
  - Keys
  - Metallic wallets or bags
  - Magnetic isolation cards
  - Metallic foil, such as the inner packaging of a cigarette box
  - Disposable heat packs
  - Discs, such as a CD or DVD, Cables, such as a USB cable
  - Mobile devices, such as smartphones, mobile phones, tablets, etc.
- Make sure to keep the Rear Multi Operation Panel clean. If the Rear Multi Operation Panel is dirty, it may not operate correctly. (When cleaning the Rear Multi Operation Panel, turn the screen off to avoid unexpected operation.)

NOTICE

■ To prevent damage to the Rear Multi Operation Panel

Observe the following precautions. Failure to do so may cause damage to the Rear Multi Operation Panel.

- Keep the Rear Multi Operation Panel free of liquids, such as drinks or rain, as they may cause a short circuit.
- Do not sit on or set heavy objects on the Rear Multi Operation Panel.
- Do not push the Rear Multi Operation Panel with a strong force or use a sharp pointed object to operate the panel.

Lexus Climate Concierge

The seat heaters, seat ventilators and heated steering wheel are each automatically controlled according to the set temperature of the air conditioning system, the outside and cabin temperature, etc. Lexus Climate Concierge allows a comfortable condition to be maintained without adjusting each system.

Lexus Climate Concierge can be operated using the air conditioning control panel (→P.344) and air conditioning control screen on the Center Display (→P.347).

Turning on Lexus Climate Concierge

Lexus Climate Concierge operates in conjunction with the automatic mode switch of the air conditioning control panel.

1 Select in the main menu on the Center Display.
2 Select "Climate".
3 Select "Options".
4 Select "Climate concierge".
5 Turn the automatic mode switch on.

■ Changing Lexus Climate Concierge control screen between front/rear (vehicles with 4-zone climate control)

Select "Rear" to display the rear air conditioning system screen.

Select "Front" to display the front air conditioning system screen.

Operation of each system

- Automatic air conditioning system (→P.344, 352)

The temperature can be adjusted independently for each seat.

- Seat heaters and ventilators (if equipped) (→P.355)

Heating or ventilation is automatically selected according to the set temperature of the air conditioning system, the outside temperature, etc.

- Heated steering wheel (if equipped) (→P.355)

Heated steering wheel operates automatically according to the set temperature of the air conditioning system, the outside temperature, etc.

■ Passenger detection functions

- When a passenger is detected in the front passenger seat, the seat heater and ventilator will operate automatically.
- When a passenger is detected in a rear seat, the seat heater and ventilator will operate automatically. (vehicles with power rear seat)

■ Seat heater/ventilator operation

When automatic mode is selected using the seat heater/ventilator switch, passenger detection is not performed.

■ Rear seat heater operation (vehicles with dual-zone climate control)

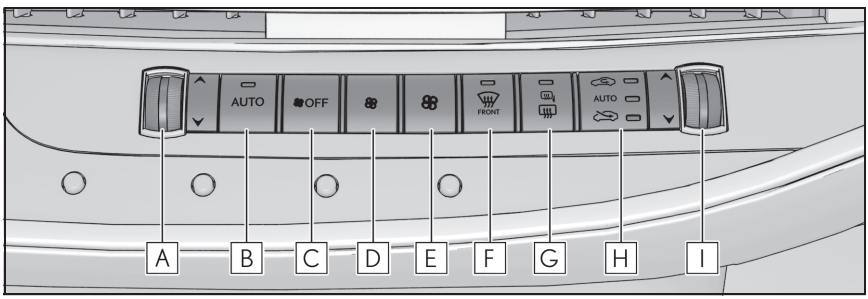
The rear seat heaters are not controlled by the Lexus Climate Concierge.

Front automatic air conditioning system

Air outlets and fan speed are automatically adjusted according to the temperature setting.

The air conditioning system can be operated using the air conditioning control panel and air conditioning control screen on the Center Display (→P.347).

Air conditioning controls



A Left-hand side temperature control switch

B Automatic mode switch

C Off switch

D Fan speed decreases switch

E Fan speed increases switch

F Windshield defogger switch

G Rear window defogger and outside rear view mirror defoggers switch

H Outside/recirculated air mode switch

I Right-hand side temperature control switch

■ **Adjusting the temperature**

Operate the temperature control switch upwards to increase the temperature and downwards to decrease the temperature.

■ **Setting the fan speed**

Operate the switch to increase the fan speed and the switch to decrease the fan speed.

Press the off switch to turn the fan off.

■ **Changing the air flow mode**

→P.347

■ **Switching between outside air and recirculated air modes**

Press the outside/recirculated air mode switch.

The mode changes as follows each time the switch is pressed.

automatic mode →  (outside air mode) →  (recirculated air mode) → automatic mode

When the system is switched to automatic mode, the air conditioning system operates automatically.

■ Defogging the windshield

Defoggers are used to defog the windshield and front side windows.

Press the windshield defogger switch.

Set the outside/recirculated air mode switch to outside air mode if the recirculated air mode is used. (It may switch automatically.)

To defog the windshield and the side windows quickly, turn the air flow and temperature up.

To return to the previous mode, press the windshield defogger switch again when the windshield is defogged.

■ Defogging the rear window and outside rear view mirrors

Defoggers are used to defog the rear window, and to remove raindrops, dew and frost from the outside rear view mirrors.

Press the rear window and outside rear view mirror defoggers switch.

The defoggers will automatically turn off after a while. The operation time changes according to the ambient temperature and vehicle speed.

■ Windshield wiper de-icer (if equipped)

→P.348

■ When the outside temperature exceeds 75°F (24°C) and the air conditioning system is on

- In order to reduce the air conditioning power consumption, the air conditioning system may switch to recirculated air mode automatically. This may also reduce fuel consumption.
- It is possible to switch to outside air mode at any time by pressing the outside/recirculated air mode switch.

■ Fogging up of the windows

The windows will easily fog up when the humidity in the vehicle is high. Turning "A/C" on will dehumidify the air from the outlets and defog the windshield effectively.

- If you turn "A/C" off, the windows may fog up more easily.
- The windows may fog up if the recirculated air mode is used.

■ When driving on dusty roads

Close all windows. If dust thrown up by the vehicle is still drawn into the vehicle after closing the windows, it is recommended that the air intake mode be set to outside air mode and the fan speed to any setting except off.

■ Outside/recirculated air mode

- Setting to the recirculated air mode temporarily is recommended in preventing dirty air from entering the vehicle interior and helping to cool the vehicle when the outside air temperature is high.
- Outside/recirculated air mode may automatically switch depending on the temperature setting or the inside temperature.

■ Registering air conditioning settings to electronic keys

- Unlocking the vehicle using an electronic key and turning the engine switch to IGNITION ON mode will recall that key's registered air conditioning settings.
- When the engine switch is turned off, the current air conditioning settings will automatically be registered to the electronic key that was used to unlock the vehicle.

- The system may not operate correctly if more than one electronic key is in the vicinity or if the smart access system with push-button start is used to unlock a passenger door.
- The doors that can recall the air conditioning setting* when unlocked using the smart access system with push-button start can be changed. For details, contact your Lexus dealer.

*: The doors that can recall the driving position memory are changed at the same time.

Operation of the air conditioning system in Eco drive mode

In Eco drive mode, the air conditioning system is controlled as follows to prioritize fuel efficiency:

- Engine speed and compressor operation controlled to restrict heating/cooling capacity
- Fan speed restricted when automatic mode is selected

To improve air conditioning performance, perform the following operations:

- Turn off eco air conditioning mode (→P.347)
- Adjust the fan speed
- Turn off Eco drive mode (→P.325)

When the outside temperature falls to nearly 32°F (0°C)

The dehumidification function may not operate even when "A/C" is selected.

Ventilation and air conditioning odors

- To let fresh air in, set the air conditioning system to the outside air mode.
- During use, various odors from inside and outside the vehicle may enter into and accumulate in the air conditioning system. This may then cause odor to be emitted from the vents.
- To reduce potential odors from occurring:

• It is recommended that the air conditioning system be set to outside air mode prior to turning the vehicle off.

• The start timing of the blower may be delayed for a short period of time immediately after the air conditioning system is started in automatic mode or with the micro dust and pollen filter on.

- When parking, the system automatically switches to outside air mode to encourage better air circulation throughout the vehicle, helping to reduce odors that occur when starting the vehicle.

Using the voice control system

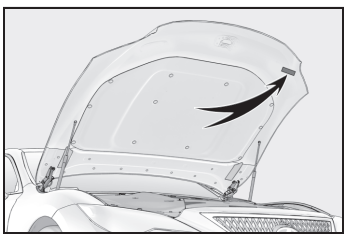
Air conditioning system can be operated using the voice control system. For details, refer to the "MULTIMEDIA OWNER'S MANUAL".

Air conditioning filter

→P.438

Air conditioning system refrigerant

- A label regarding the refrigerant of the air conditioning system is attached to the hood at the location shown in the following illustration.



- The meaning of each symbol on the label are as follows:

	Caution
	Air conditioning system
	Air conditioning system lubricant type
	Requires registered technician to service air conditioning system
	Flammable refrigerant

Customization

Some functions can be customized.
(→P.510)

WARNING

To prevent the windshield from fogging up

Do not use the windshield defogger switch during cool air operation in extremely humid weather. The difference between the temperature of the outside air and that of the windshield can cause the outer surface of the windshield to fog up, blocking your vision.

When the outside rear view mirror defoggers are operating

Do not touch the outside rear view mirror surfaces, as they can become very hot and burn you.

NOTICE

To prevent battery discharge

Do not leave the air conditioning system on longer than necessary when the engine is off.

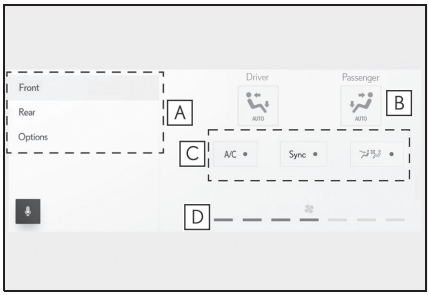
When repairing/replacing parts of the air conditioning system

Have repair/replacement performed by your Lexus dealer.
When a part of the air conditioning system, such as the evaporator, is to be replaced, it must be replaced with a new one.

Air conditioning control screen

Main control screen

1 Select in the main menu on the Center Display.
2 Select "Climate".
3 Select "Front".



A Sub menu

Selecting the sub menu item to switch the screen display.

"Front" : Display the front air conditioning control screen

"Rear" : Display the rear air conditioning control screen (vehicles with 4-zone climate control) (→P.352)

"Options" : Display the option screen (→P.348)

B Select the air flow mode

Each time the switch is selected, the airflow mode is changed.

: Air flows to the upper body

: Air flows to the upper body and feet

: Air flows to the feet

: Air flows to the feet and the windshield defogger operates

Depending on the conditions, some air may also flow to other areas than the selected air outlets.

C Turn the function on/off

Each of the following functions can be switched on and off.

When the function is on, the indicator illuminates on the control screen.

"A/C": Set cooling and dehumidification function

"Sync": Adjust the temperature for driver's side and front passenger's side simultaneously (vehicles with dual-zone climate control) / Adjust the temperature for the driver, front passenger and left and right rear passenger seats simultaneously (vehicles with 4-zone climate control) (→P.350)

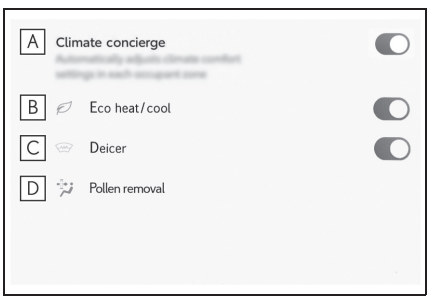
: Select front seat concentrated airflow mode (S-FLOW) (→P.349)

D Fan speed level display

The current fan speed level is displayed.

■ Option control screen

The functions can be switched (on) and (off), or the function settings can be selected from multiple options.



A Set Lexus Climate Concierge (→P.343)

B Set eco air conditioning mode

Air conditioning and heater output is limited to prioritize fuel economy.

C Prevent ice from building up on the windshield and wiper blades (Windshield wiper de-icer) (if equipped)

D Removing pollen from the air (Micro dust and pollen filter)

■ Windshield wiper de-icer (if equipped)

This feature is used to prevent ice from building up on the windshield and wiper blades.

The windshield de-icer will automatically turn off after a while.

■ Eco air conditioning mode

When Eco drive mode is selected using the driving mode select switch, eco air conditioning mode turns on.

When a drive mode other than Eco drive mode is selected, eco air conditioning mode may turn off.

■ Micro dust and pollen filter

Outside air mode switches to (recirculated air) mode. Pollen is removed from the air and the air flows to the upper part of the body.

Usually the system will automatically turn off after a while.

In order to prevent the windshield from fogging up when the outside air is cold, the dehumidification function may operate or the outside/recirculated air mode may not switch to (recirculated air) mode.

Pollen is filtered even if the micro dust and pollen filter is turned off.

WARNING

■ To prevent burns (vehicles with windshield wiper de-icer)

Do not touch the glass at lower part of the windshield or to the side of the front pillars when the windshield wiper de-icer is on.

Using automatic mode

1 Press the automatic mode switch.

2 Press the outside/recirculated air mode switch to switch to automatic air intake mode.

The air conditioning system automatically

switches between outside air and recirculated air modes.

3 Adjust the temperature setting.

4 To stop the operation, press the off switch.

If the fan speed setting or air flow modes are operated, the automatic mode indicator goes off. However, automatic mode for functions other than that operated is maintained.

■ **Using automatic mode**

Fan speed is adjusted automatically according to the temperature setting and the ambient conditions.

Therefore, the fan may stop for a while until warm or cool air is ready to flow immediately after the automatic mode switch is pressed or "AUTO" is selected.

Cool air may blow around the upper body even when the heater is on due to sunlight.

■ **Automatic mode for air intake control**

In automatic mode, the system detects exhaust gas and other pollutants and automatically switches between outside air and recirculated air modes.

When the dehumidification function is off, and the fan is operating, turning automatic mode on will activate the dehumidification function.

Front seat concentrated airflow mode (S-FLOW)

When front seat concentrated airflow mode is enabled, air flow to the rear seats will be stopped for increased fuel efficiency.

When the front passenger seat is not occupied, airflow may switch to only the driver's seat.

Front seat concentrated airflow mode operates in the following situations.

- The windshield defogger is not operating
- Pollen removal mode is not operating

While operating, the indicator on the air conditioning control screen illuminates.

■ Manually turning front seat concentrated airflow mode on/off

In front seat concentrated airflow mode, directing airflow to the front seats only and to all seats can be switched via switch operation. When the mode has been switched manually, automatic airflow control stops operating.

Select on the main control screen (→P.347) and switch the airflow.

- Indicator illuminated: Airflow to the front seats only
- Indicator off: Airflow to all the seats.

■ **Operation of automatic airflow control**

- In order to maintain a comfortable interior, airflow may be directed to seats without passengers immediately after the engine is started and at other times depending on the outside temperature.
- After the engine is started, if passengers move around inside or enter/exit the vehicle, the system cannot accurately detect the presence of passengers and automatic airflow control will not operate.
- If it is very hot or very cold and the system determines that air conditioning to the whole vehicle is required, air flow will be directed to the rear seats, regardless of whether front seat concentrated airflow mode is enabled/disabled.
- If front seat concentrated airflow mode is disabled manually, it will be automatically

enabled when the engine is started after being stopped for a period of time.

Only when front seat concentrated airflow mode is enabled automatically, it will be automatically disabled when a rear door is opened and closed.

- When front seat concentrated airflow mode is enabled manually, air flow will not be directed to the rear seats, even though a rear door is opened and closed.

To direct air flow to the rear seats, manually disable front seat concentrated airflow mode.

■ **Passenger detection conditions**

- The front seat passenger is judged as present when any of the following is detected:
  - Fastening of the seat belt buckle
  - Opening/Closing of the front passenger door
  - Operation of the front passenger seat
  - Occupation of the front passenger seat

Once the system determines the presence of a rear seat passenger, it will not determine otherwise during that trip.

- The detection of a rear seat passenger is made by the opening/closing of a rear door.

Once the system determines the presence of a rear seat passenger, it will not determine otherwise during that trip.

■ **To return to automatic airflow control**

1. With the indicator off, turn the engine switch off.
2. After 60 minutes or more elapse, turn the engine switch to IGNITION ON mode.

Adjusting the temperature for driver seat, front passenger seat and rear passenger seats simultaneously ("Sync" mode)

▶ Vehicles with dual-zone climate control

To turn on the "Sync" mode, select the "Sync" on the air conditioning control screen.

The driver's side temperature control switches can be used to adjust the temperature for the driver's side and front passenger's side.

To enter individual mode, operate the passenger's side temperature control switches or select the "Sync" again.

The indicator on the air conditioning control screen comes on when the "Sync" mode is on.

▶ Vehicles with 4-zone climate control

To turn on the "Sync" mode, select the "Sync" on the air conditioning control screen.

The driver's side temperature control switches can be used to adjust the temperature for the driver's seat, front passenger's seat and left and right rear passenger seats side.

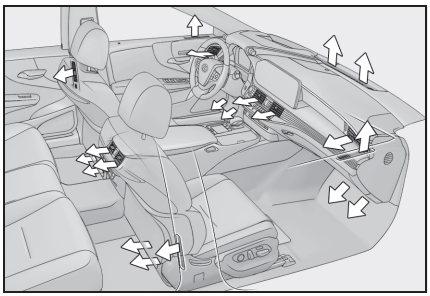
To enter individual mode, operate the passenger's side or left and right rear passenger seats side temperature control switches or select the "Sync" again.

The indicator on the air conditioning control screen comes on when the "Sync" mode is on.

Air outlet layout and operations

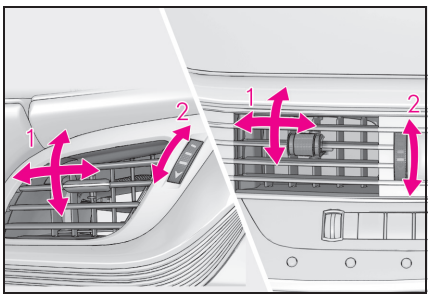
■ Location of air outlets

The air outlets and air volume changes according to the selected air flow mode.



■ Adjusting the position of and opening and closing the air outlets

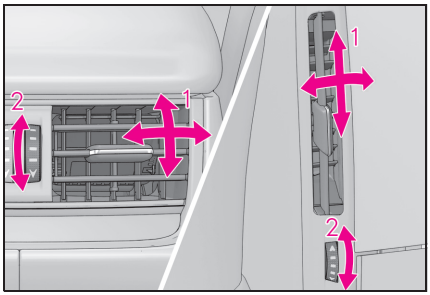
▶ Front center/front side



1 Direct air flow to the left or right, up or down

2 Turn the knob to open or close the vent

▶ Rear center/rear side



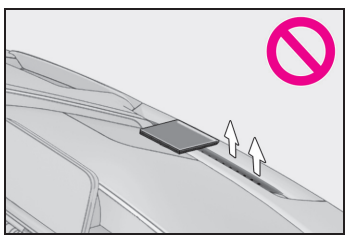
1 Direct air flow to the left or right, up or down

2 Turn the knob to open or close the vent

WARNING

■ To prevent the windshield defogger from operating improperly

Do not place anything on the instrument panel which may cover the air outlets. Otherwise, air flow may be obstructed, preventing the windshield defoggers from defogging.



Rear automatic air conditioning system*

*: If equipped

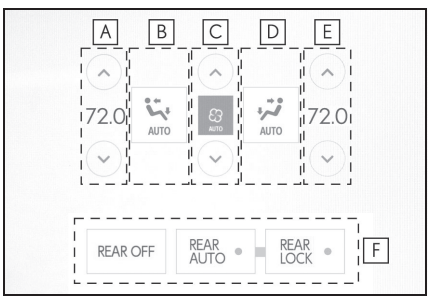
The air outlets and fan speed are automatically adjusted according to the temperature setting.

The rear air conditioning system can be operated using the Center Display or Rear Multi Operation Panel.

Rear air conditioning control screen

■ Center Display

1 Select in the main menu on the Center Display.
2 Select "Climate".
3 Select "Rear".



A Adjust the left side rear seat temperature setting

B Select the left side rear seat air flow mode

C Adjust the rear seats fan speed setting

D Select the right side rear seat air flow mode

: Air flows to the upper body

: Air flows to the upper body and feet

: Air flows to the feet

Depending on the conditions, some air may also flow to other areas than the selected air outlets.

E Adjust the right side rear seat temperature setting

F Switch the following functions on and off

"REAR OFF": Turn the rear seats fan off

"REAR AUTO": Set the rear seats automatic mode on/off (→P.353)

"REAR LOCK": Disables operation of the rear air conditioning system using the Rear Multi Operation Panel

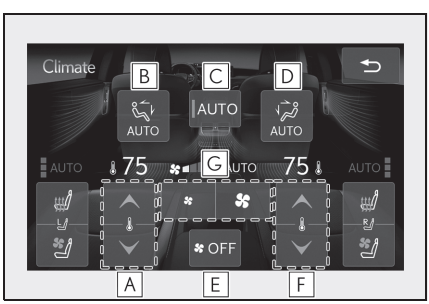
■ Rear Multi Operation Panel

Touch "Climate" on the home screen to display the rear air conditioning control screen. (→P.340)

Some functions of the rear air conditioning system can also be operated from the shortcut screen.

The Rear Multi Operation Panel cannot be used to operate the rear air conditioning system if the function is disabled.

▶ Rear air conditioning control screen



A Adjust the left side rear seat temperature setting

B Select the left side rear seat air flow mode

: Air flows to the upper body

: Air flows to the upper body and feet

: Air flows to the feet

C Set the rear seats automatic mode on/off (→P.353)

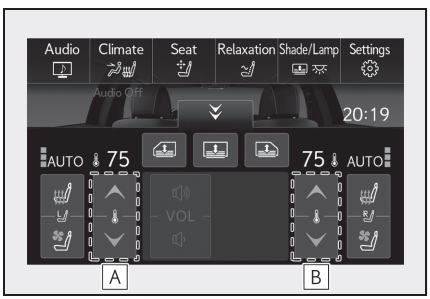
D Select the right side rear seat air flow mode

E Turn the rear seats fan off

F Adjust the right side rear seat temperature setting

G Adjust the rear seats fan speed setting

▶ Shortcut screen



A Adjust the left side rear seat temperature setting

B Adjust the right side rear seat temperature setting

■ **Using the voice control system**

Air conditioning system can be operated using the voice control system. For details, refer to the "MULTIMEDIA OWNER'S MANUAL".

Using automatic mode

▶ Center Display

1 Select "REAR AUTO" on the rear air conditioning control screen. (→P.352)

2 To stop the operation, select "REAR OFF" on the rear air conditioning control screen. (→P.352)

If the fan speed setting or air flow modes are operated, the automatic mode indicator goes off. However, automatic mode for functions other than that operated is maintained.

▶ Rear Multi Operation Panel

1 Select "AUTO" on the rear air conditioning control screen. (→P.352)

2 To stop the operation, select "OFF" on the rear air conditioning control screen. (→P.352)

If the fan speed setting or air flow modes are operated, the automatic mode indicator goes off. However, automatic mode for functions other than that operated is maintained.

■ **Using automatic mode**

Fan speed is adjusted automatically according to the temperature setting and the ambient conditions.

Therefore, the fan may stop for a while until warm or cool air is ready to flow immediately after "REAR AUTO" is selected or "AUTO" is touched.

Cool air may blow around the upper body even when the heater is on due to sunlight.

Adjusting the temperature setting of the rear seats

The temperature setting of the rear seats can be adjusted using the following methods:

- When the "Sync" indicator is on: Adjust the driver's seat temperature.

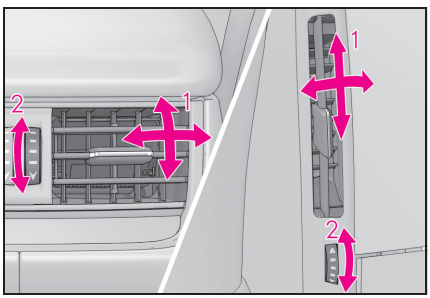
Adjust the temperature setting of each rear seat using the Center Display or Rear Multi Operation Panel.

- Adjust the temperature setting of each rear seat using the Center Display (rear air conditioning control screen) or Rear Multi Operation Panel.

The temperature setting of each rear seat can be changed independently.

Air outlet layout and operations

Rear center outlets and rear side outlets



1 Direct air flow to the left or right, up or down

2 Turn the knob to open or close the vent

NOTICE

To prevent battery discharge

Do not leave the air conditioning system on longer than necessary when the engine is off.

Heated steering wheel/seat heaters/seat ventilators*

*: If equipped

Heated steering wheel (if equipped):

Warms up the grip of the steering wheel.

Front seat heaters (if equipped)/Rear seat heaters (if equipped):

Warm up the seat upholstery.

Front seat ventilators (if equipped)/Rear seat ventilators (if equipped):

Maintain good ventilation by pulling air through the seat upholstery.

WARNING

■ To prevent minor burn injuries

Care should be taken if anyone in the following categories comes in contact with the steering wheel or seats when the heater is on:

- Babies, small children, the elderly, the sick and the physically challenged
- Persons with sensitive skin
- Persons who are fatigued
- Persons who have taken alcohol or drugs that induce sleep (sleeping drugs, cold remedies, etc.)

■ To prevent overheating and minor burn injuries

Observe the following precautions when using the seat heaters.

- Do not cover the seat with a blanket or cushion when using the seat heater.
- Do not use seat heater more than necessary.

NOTICE

■ To prevent damage to the seat heaters and seat ventilators

Do not put heavy objects that have an uneven surface on the seat and do not stick sharp objects (needles, nails, etc.) into the seat.

■ To prevent battery discharge

Do not use the functions when the engine is off.

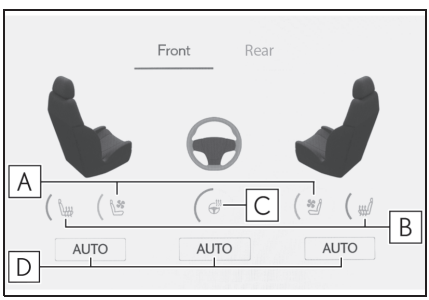
Operating the display

■ Center Display

1 Select on the main menu.

2 Select "Comfort".

▶ Heated steering wheel/front seat heater/front seat ventilator



A Adjust the front seat ventilator fan speed level

Each time the switch is pressed, the operation condition changes as follows.

AUTO (lit) → Hi (3 segments lit) → Mid (2 segments lit) → Lo (1 segment lit) → Off

B Adjust the front seat heater temperature level

Each time the switch is pressed, the operation condition changes as follows.

AUTO (lit) → Hi (3 segments lit) → Mid (2 segments lit) → Lo (1 segment lit) → Off

C Adjust the heated steering wheel temperature level

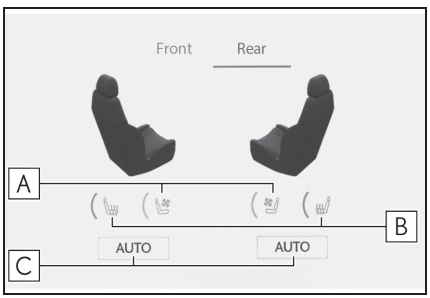
Each time the switch is pressed, the operation condition changes as follows.

AUTO (lit) → Hi (2 segments lit) → Lo (1 segment lit) → Off

D Set the automatic mode

- Driver's seat heater/seat ventilator
- Front passenger's seat heater/seat ventilator
- Heated steering wheel

▶ Rear seat heater/rear seat ventilator (if equipped)



A Adjust the rear seat ventilator fan speed level

Each time the switch is pressed, the operation condition changes as follows.

AUTO (lit) → Hi (3 segments lit) → Mid (2 segments lit) → Lo (1 segment lit) → Off

B Adjust the rear seat heater temperature level

Each time the switch is pressed, the operation condition changes as follows.

AUTO (lit) → Hi (3 segments lit) → Mid (2 segments lit) → Lo (1 segment lit) → Off

C Set the automatic mode

- Left-hand side rear seat heater/rear seat ventilator
- Right-hand side rear seat heater/rear seat ventilator

■ Rear Multi Operation Panel (if equipped)

Touch "Climate" on the home screen to display the air conditioning control screen.(→P.340)

The rear seat heaters and rear seat ventilators can also be operated from the shortcut screen.

The Rear Multi Operation Panel cannot be used to operate the rear air conditioning system if the function is disabled. (→P.352)

▶ Rear air conditioning control screen



A Adjust the rear seat heater temperature level

Each time the switch is selected, the temperature level and level indicator (orange) change as follows:

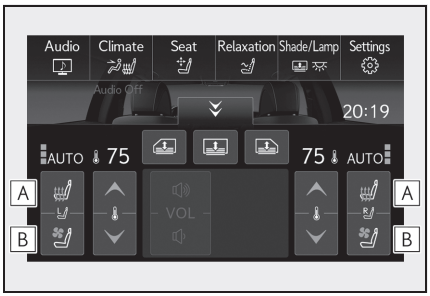
AUTO→Hi→Mid→Lo→OFF

B Adjust the rear seat ventilator fan speed level

Each time the switch is selected, the fan speed level and level indicator (blue) change as follows:

AUTO→Hi→Mid→Lo→OFF

▶ Shortcut screen



A Adjust the rear seat heater temperature level

Each time the switch is selected, the temperature level and level indicator (orange) change as follows:

AUTO→Hi→Mid→Lo→OFF

B Adjust the rear seat ventilator fan speed level

Each time the switch is selected, the fan speed level and level indicator (blue) change as follows:

AUTO→Hi→Mid→Lo→OFF

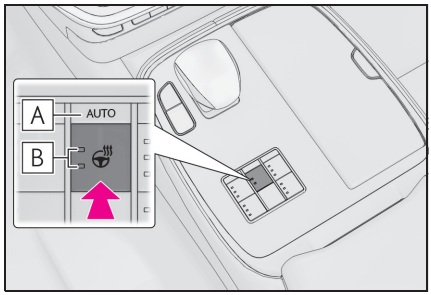
Operating the switches

■ Heated steering wheel (if equipped)

Each time the switch is pressed, the operation condition changes as follows.

AUTO (lit) → Hi (2 segments lit) → Lo (1 segment lit) → Off

The AUTO indicator A and/or level indicator B illuminates during operation.



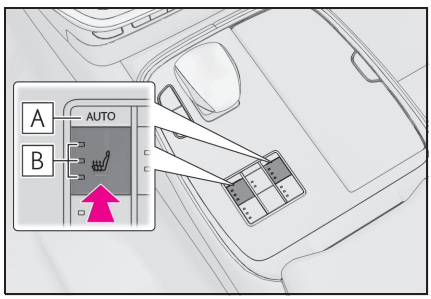
■ Seat heaters (if equipped)

▶ Front seat heaters

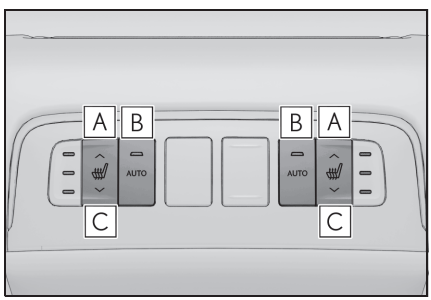
Each time the switch is pressed, the operation condition changes as follows.

AUTO (lit) → Hi (3 segments lit) → Mid (2 segments lit) → Lo (1 segment lit) → Off

The AUTO indicator A and/or level indicator B illuminates during operation.



▶ Rear seat heaters* (if equipped)



A Increases the rear seat heater temperature level

The seat ventilator can be adjusted in 3 levels. (Low, Mid or Hi)

B Enables/Disables the automatic mode of the rear seat heaters

C Decreases the rear seat heater temperature level

If this switch is selected when the rear seat heater temperature level is set to Lo, the rear seat heater will turn off.

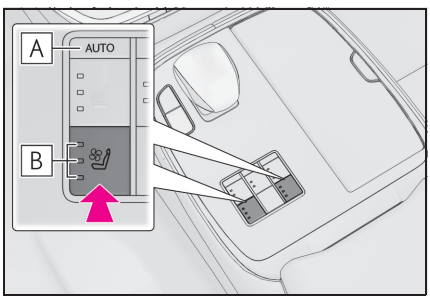
*: Vehicles without power rear seat

■ Front seat ventilators (if equipped)

Each time the switch is pressed, the operation condition changes as follows.

AUTO (lit) → Hi (3 segments lit) → Mid (2 segments lit) → Lo (1 segment lit) → Off

The AUTO indicator A and/or level indicator B illuminates during operation.



■ The heated steering wheel, seat heaters and seat ventilators can be used when

The engine switch is in IGNITION ON mode.

■ Air conditioning system-linked control mode

When the seat ventilator fan speed level is Hi, the seat ventilator fan speed becomes higher according to the fan speed of the air conditioning system.

■ When the air conditioning system is operating in front seat concentrated airflow mode (S-FLOW)

If a passenger is not detected in the front passenger seat, the seat ventilator and seat heater of the front passenger's seat will be turned off if on. (→P.349)

■ Using the voice control system

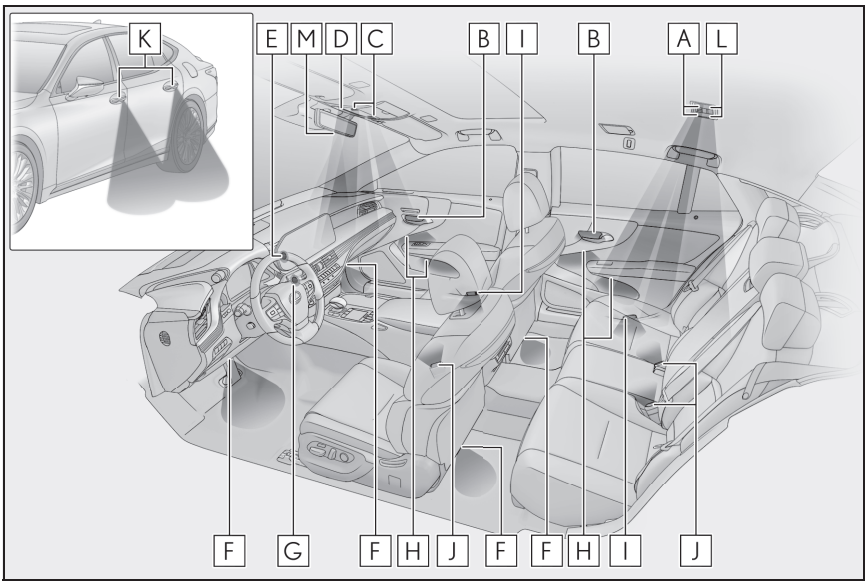
The heated steering wheel, seat heaters and seat ventilators can be operated using voice control system. For details, refer to the "MULTIMEDIA OWNER'S MANUAL".

■ Customization

Some functions can be customized. (→P.510)

Interior lights list

Location of the interior lights



A Rear personal lights (→P.361)

B Inside door handle lights

C Front personal lights (→P.361)

D Front interior lights (→P.360)

E Clock light

F Footwell lights

G Engine switch light

H Door trim ornament lights

I Door courtesy lights

J Seat belt buckle lights

K Outer foot lights

L Rear interior light (→P.360)

M Shift lever lights

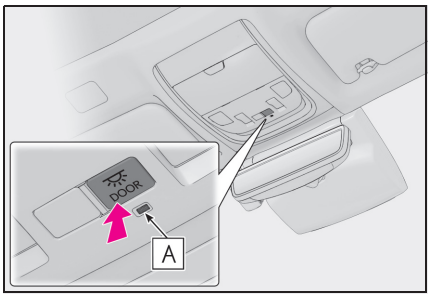
Operating the interior lights

■ Turning the door position on

Press the door-linked interior light switch

The lights are turned on and off according to whether the doors are opened/closed.

When the door position is on, the indicator A illuminates.

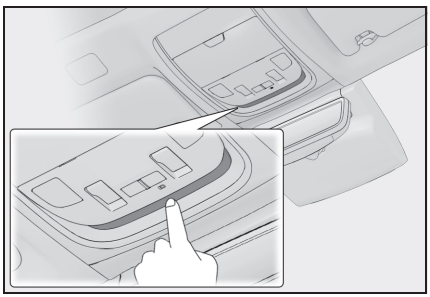


■ Turning the lights on/off

▶ Front

Turns the lights on/off (touch the light)

When a door is opened while the door position is on, the lights turn on.

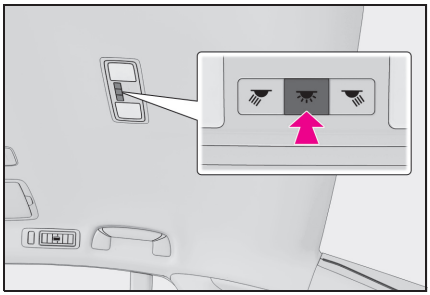


▶ Rear (vehicles without a panoramic moon roof)

On/off

The rear interior light turns on/off together the front interior lights.

When a door is opened while the door position is on, the lights turn on.

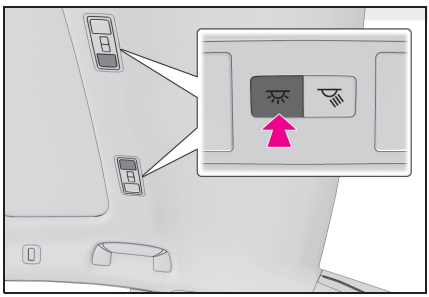


▶ Rear (vehicles with a panoramic moon roof)

On/off

The rear interior light turns on/off together the front interior lights.

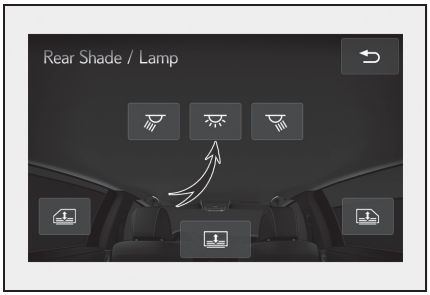
When a door is opened while the door position is on, the lights turn on.



■ Using the Rear Multi Operation Panel (if equipped)

1 Display the home screen and then touch “Shade/Lamp” or “Lamp”. (→P.340)

2 To turn on/off the rear interior lights, touch the respective button.



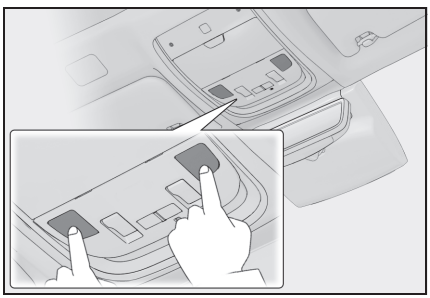
Operating the personal lights

■ Turning the lights on/off

▶ Front

Turns the lights on/off (touch the light)

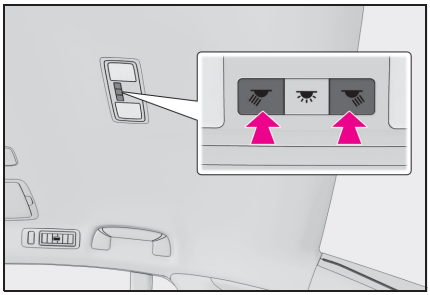
When a door is opened while the door position is on, the lights turn on.



▶ Rear (vehicles without a panoramic moon roof)

On/dimmed/off

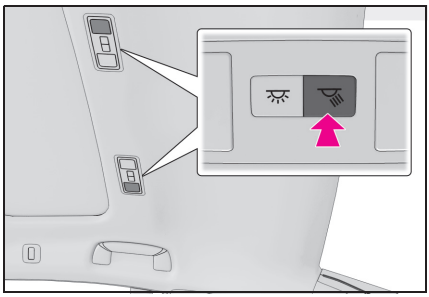
When a door is opened while the door position is on, the lights turn on.



▶ Rear (vehicles with a panoramic moon roof)

On/dimmed/off

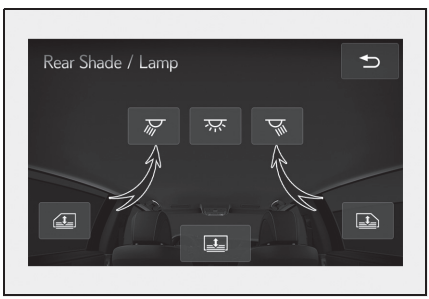
When a door is opened while the door position is on, the lights turn on.



■ Using the Rear Multi Operation Panel (if equipped)

1 Display the home screen and then touch “Shade/Lamp” or “Lamp”. (→P.340)

2 To turn on/dimmed/off the rear personal lights, touch the respective button.



■ Illuminated entry system

The lights automatically turn on/off according to the engine switch mode, the presence of the electronic key, whether the doors are locked/unlocked, and whether the doors are opened/closed.

■ To prevent the battery from being discharged

If the interior lights remain on when the engine switch is turned off, the lights will go off automatically after 20 minutes.

■ When front interior light or front personal lights do not respond as normal

- When water, dirt, etc., have adhered to the lens surface
- When operated with a wet hand
- When wearing gloves, etc.

■ The interior lights may turn on automatically when

If any of the SRS airbags deploy (inflate) or in the event of a strong rear impact, the interior lights will turn on automatically.

The interior lights will turn off automatically after approximately 20 minutes.

The interior lights can be turned off manually. However, in order to help prevent further collisions, it is recommended that they be left on until safety can be ensured.

(The interior lights may not turn on automatically depending on the force of the impact and conditions of the collision.)

■ Customization

Some functions can be customized.
(→P.510)

⚠ NOTICE

■ To prevent battery discharge

Do not leave the lights on longer than necessary when the engine is not running.

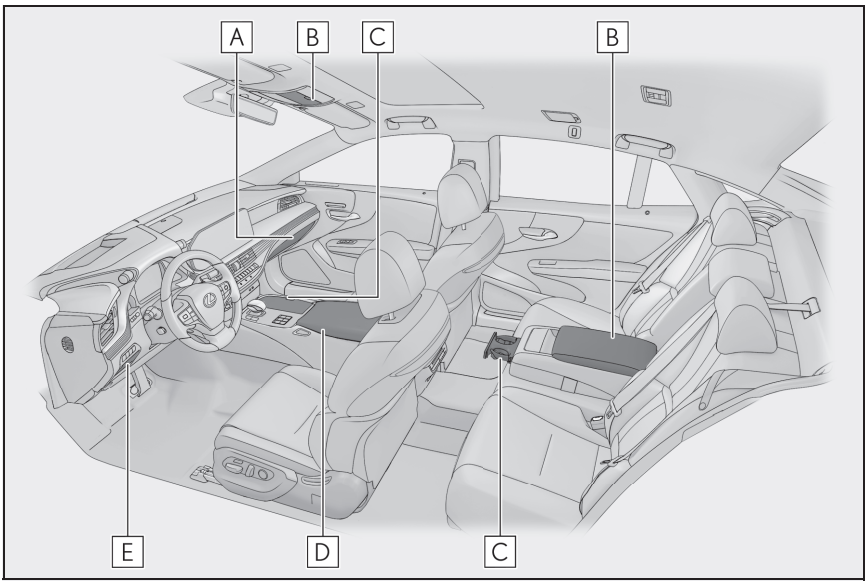
■ Removing light lenses

Never remove the lens for the front interior light and front personal lights. Otherwise, the lights will be damaged. If a lens needs to be removed, contact your Lexus dealer.

List of storage features

Location of the storage features

▶ Vehicles without power rear seat



A Glove box (→P.364)

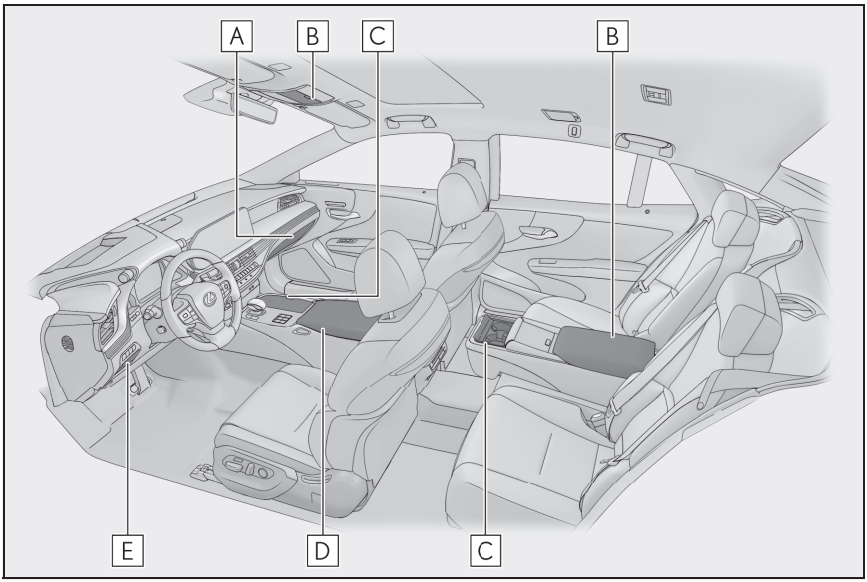
B Auxiliary boxes (→P.367)

C Cup holders (→P.365)

D Console box (→P.366)

E Coin holder (→P.365)

▶ Vehicles with power rear seat



A Glove box (→P.364)

B Auxiliary boxes (→P.367)

C Cup holders (→P.365)

D Console box (→P.366)

E Coin holder (→P.365)

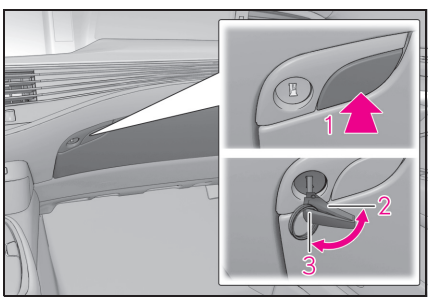
WARNING

■ Items that should not be left in the storage spaces

Do not leave glasses, lighters or spray cans in the storage spaces, as this may cause the following when cabin temperature becomes high:

- Glasses may be deformed by heat or cracked if they come into contact with other stored items.
- Lighters or spray cans may explode. If they come into contact with other stored items, the lighter may catch fire or the spray can may release gas, causing a fire hazard.

Glove box



1 Open (push button)

2 Unlock with the mechanical key

3 Lock with the mechanical key

■ Glove box light

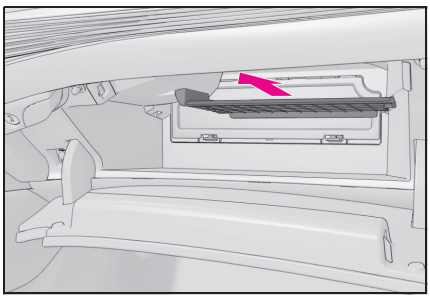
The glove box light turns on when the tail lights are on.

■ Trunk opener main switch

The trunk opener main switch is located in the glove box. (→P.107)

■ Removing the partition

The partition inside the glove box can be removed by pulling it.



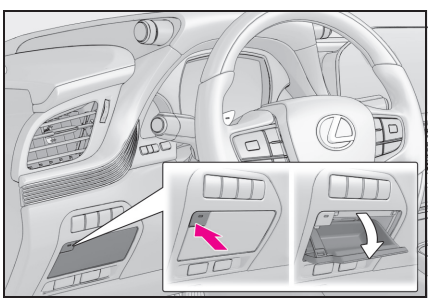
WARNING

■ Caution while driving

Keep the glove box closed. In the event of sudden braking or sudden swerving, an accident may occur due to an occupant being struck by the open glove box or the items stored inside.

Coin holder

Push the button.



■ Coin holder light

The coin holder light turns on when the tail lights are on.

WARNING

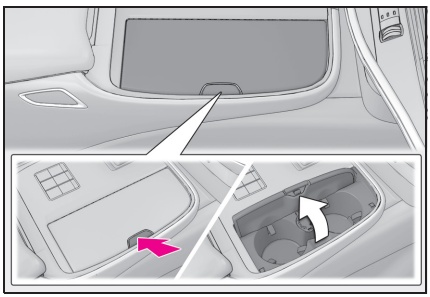
■ Caution while driving

Keep the coin holder closed.
Injuries may result in the event of an accident or sudden braking.

Cup holders

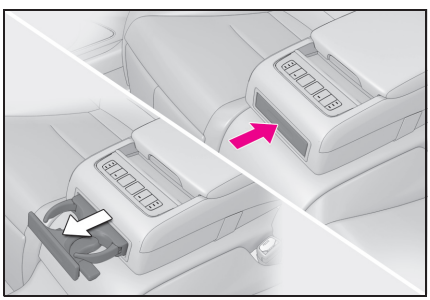
▶ Front

Press in and release the button.



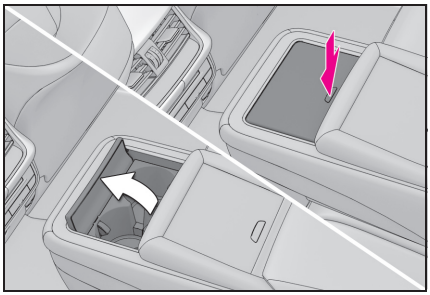
▶ Rear (vehicles without power rear seat)

Pull the armrest down then push in the cup holder trim to extend the cup holders.



▶ Rear (vehicles with power rear seat)

Press in and release the button.



When stowing the rear cup holders (vehicles without power rear seat)

Stow the cup holder with the armrest down. The cup holder cannot be stowed if the armrest is not down.

WARNING

Items unsuitable for the cup holder

Do not place anything other than cups or beverage cans in the cup holders. Inappropriate items must not be stored in the cup holders even if the lid is closed. Other items may be thrown out of the holders in the event of an accident or sudden braking and cause injury. If possible, cover hot drinks to prevent burns.

When not in use

Keep the cup holders closed.
Injuries may result in the event of an accident or sudden braking.

NOTICE

To prevent damage to the rear cup holder (vehicles without power rear seat)

Stow the cup holder before stowing the armrest.

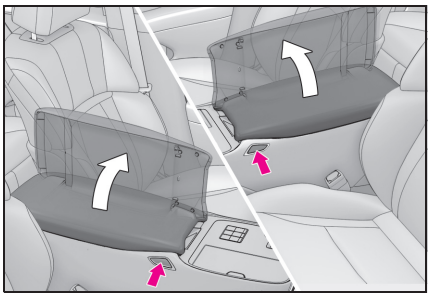
To avoid damaging the power outlet

Close the lid of the power outlet in the front cup holder when the power outlet is not in use. Foreign objects or liquids that enter the power outlet may cause a short circuit.

Console box

Press a button to open the console box.

The console box can be opened from either side.

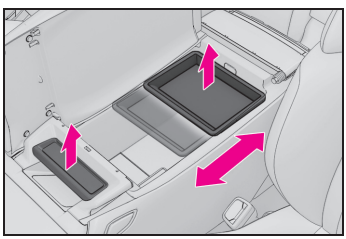


Console box light

The console box light turns on when the tail lights are on.

Trays in the console box

The trays can be removed and/or slid.



WARNING

Caution while driving

Keep the console box closed.
Injuries may result in the event of an accident or sudden braking.

NOTICE

Trays

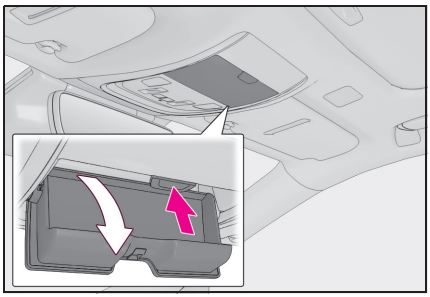
Do not insert items exceeding the height of each tray. Doing so may prevent opening and closing of the lid.

Auxiliary boxes

▶ Overhead

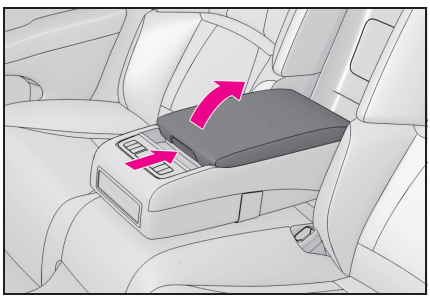
Press in the button.

This box is useful for temporarily storing sunglasses and similar small items.



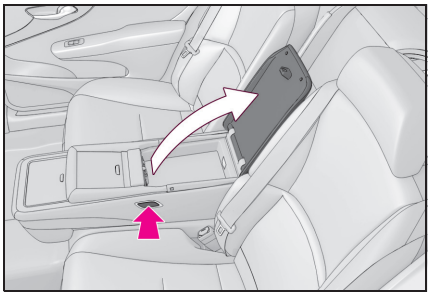
▶ Rear seat (vehicles without power rear seat)

Pull the armrest down then push the knob and lift the lid to open it.



▶ Rear seat (vehicles with power rear seat)

Pull the armrest down then press the button to open the lid.



WARNING

■ Caution while driving

Do not leave the auxiliary box open while driving.
Items may fall out and cause death or serious injury in case of an accident or sudden stop.

■ Items unsuitable for storing (overhead)

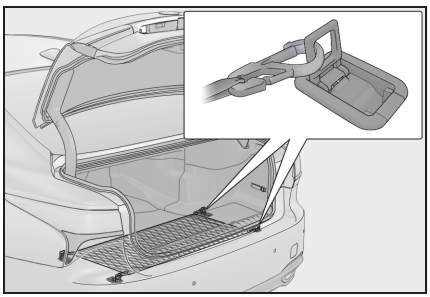
Do not store items heavier than 0.4 lb. (0.2 kg).
Doing so may cause the auxiliary box to open and the items inside may fall out, resulting in an accident.

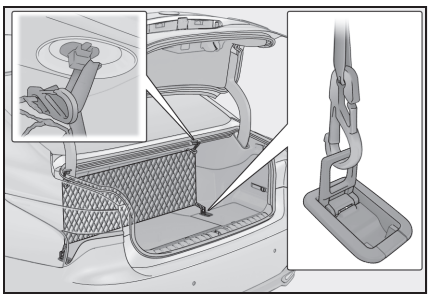
Trunk features

Cargo net

The cargo net is provided for securing loose items on the floor or items inside the trunk.

Raise the cargo hooks on the floor.
Hook the net on the cargo hooks.



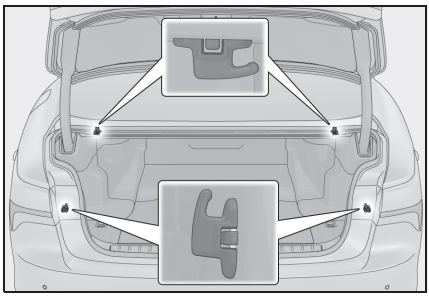


WARNING

■ When the cargo net is not in use

To avoid injury, always return the cargo hooks on the floor to their stowed positions.

Shopping bag hooks



NOTICE

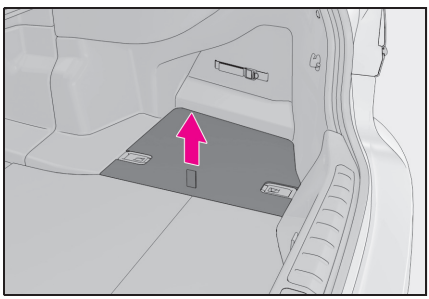
■ To prevent damage to the grocery bag hooks

Do not hang any object heavier than 11 lb. (5 kg) on the grocery bag hooks.

Luggage mats

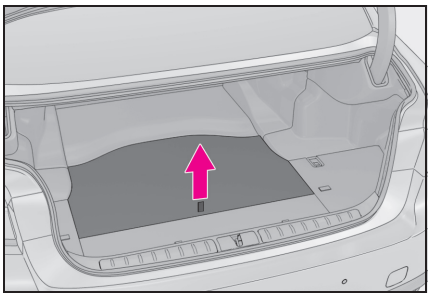
▶ Side

Pull the strap upwards to lift the luggage mat and remove it.

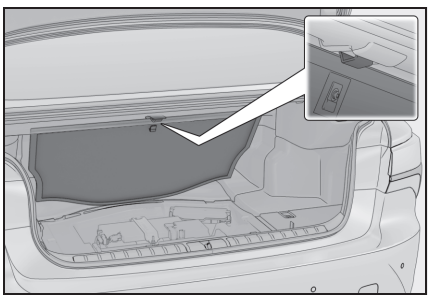


▶ Front

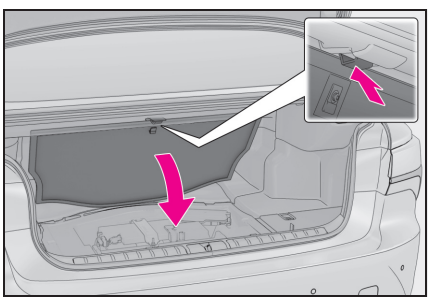
1 Pull the strap upwards and lift up the luggage mat.



2 Lift the luggage mat until it engages with the hook.



To return the luggage mat to its original position, push the hook and lower the luggage mat.



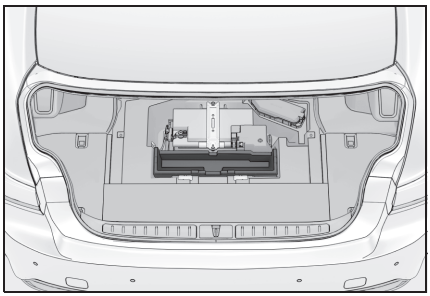
NOTICE

■ To prevent damage to the hook for the front luggage mat

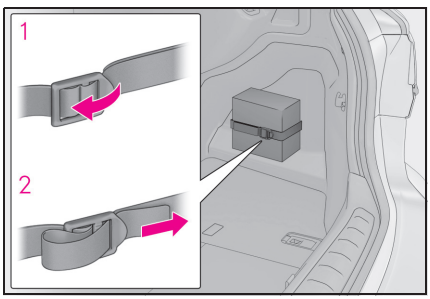
Do not hang a grocery bag or any other object from the hook.

Auxiliary boxes

Auxiliary boxes are under the luggage mats.



First-aid kit storage belt

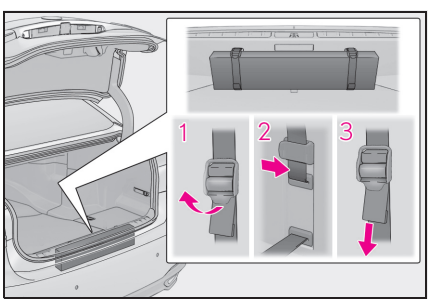


1 Loosen the belt

2 Tighten the belt

Warning reflector storage belt

■ Using a belt to hold an object



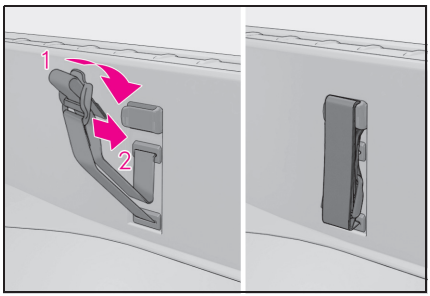
1 Loosen the belt

2 Pass the belt through the clip

3 Tighten the belt

Depending on the size and shape of an object, such as the case of a warning reflector, the object may not be able to be secured with the belts or stowed in an auxiliary box.

■ Stowing the belt



1 Fold the belt

2 Secure the belt with the clip

To prevent damage to the warning reflector storage belt when it is not in use, stow the belt.

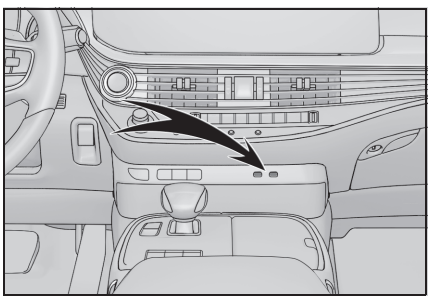
Other interior features

USB charging ports

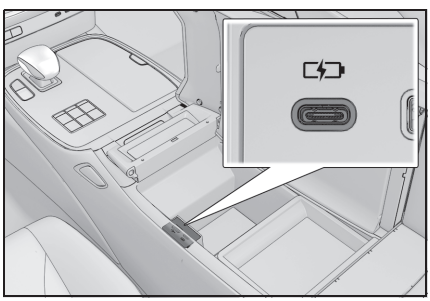
The USB charging ports are used to supply 3.0 A of electricity at 5 V to external devices.
The USB charging ports are for charging only. They are not designed for data transfer or other purposes. Depending on the external device, it may not charge properly. Refer to the manual included with the device before using a USB charging port.

■ **Using the USB charging ports**

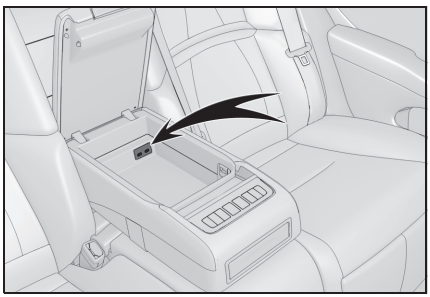
▶ Instrument panel



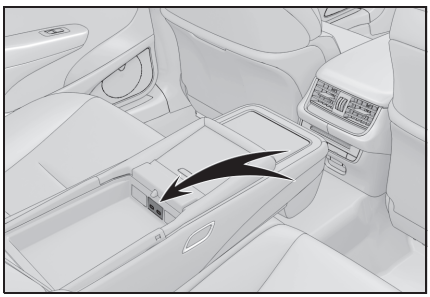
▶ Console box



▶ Armrest (vehicles without power rear seat)



▶ Armrest (vehicles with power rear seat)



■ **The USB charging ports can be used when**

The engine switch is in ACCESSORY or IGNITION ON mode.

■ **Situations in which the USB charging ports may not operate correctly**

- If a device which consumes more than 3.0 A at 5 V is connected
- If a device designed to communicate with a personal computer, such as a USB memory device, is connected
- If the connected external device is turned off (depending on device)
- If the temperature inside the vehicle is high, such as after the vehicle has been parked in the sun

■ **About connected external devices**

Depending on the connected external device, charging may occasionally be suspended and then start again. This is not a malfunction.

WARNING

■ When using the USB charging ports on the instrument panel

When connecting to a USB charging port on the instrument panel, make sure that the charging cable will not interfere with the shifting operation. If the shift lever gets caught by the cable while shifting, a mis-shift may occur, possibly leading to an accident.

NOTICE

■ To prevent damage to the USB charging ports

- Do not insert foreign objects into the ports.
- Do not spill water or other liquids into the ports.
- Do not apply excessive force to or impact the USB charging ports.
- Do not disassemble or modify the USB charging ports.

■ To prevent damage to external devices

- Do not leave external devices in the vehicle. The temperature inside the vehicle may become high, resulting in damage to an external device.
- Do not push down on or apply unnecessary force to an external device or the cable of an external device while it is connected.

■ To prevent battery discharge

Do not use the USB charging ports for a long period of time with the engine stopped.

Wireless charger

A portable device, such as a smartphone or mobile battery, can be charged by just placing it on the charging area, provided the device is compatible with the Qi wireless charging standard created by the Wireless Power Consortium.

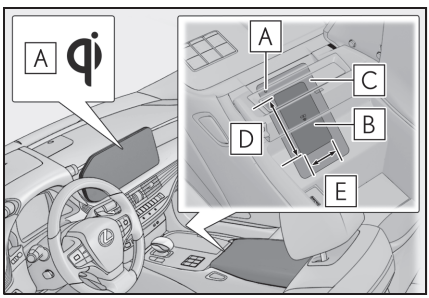
The compatible portable devices can be found on the following Wireless Power Consortium website.
https://www.wirelesspowerconsortium.com/

The wireless charger cannot be used with a portable device that is larger than the charging tray. Additionally, depending on the portable device, the wireless charger may not operate properly. Refer to the operation manual of the portable device.

■ The "Qi" symbol

The "Qi" logo is a trademark of the Wireless Power Consortium.

■ Name for all parts



A Operation indicator light

B Charge area*

C Charging tray

D Approximately 10 cm (3.9 in.)

E Approximately 2.5 cm (1.0 in.)

*: Compatible portable devices and the wireless charger contain charging coils.

The charging coil in the wireless charger can be moved within the charge area up to the position of the charging coil inside a portable device. Charging is possible if the center of the coil of the portable device is placed within the charge area.

Additionally, if 2 or more portable devices are placed on the charging tray at the same time, each charging coil may not be detected correctly and charging may not be possible.

Using the wireless charger

Place the portable device on the charging area.

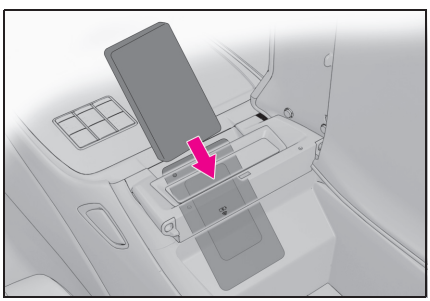
Place the charging side of the portable device down with the center of the device in the center of the charging area.

Depending on the situations, such as the size or shape of a smartphone, it may not be stored.

When charging, the operation indicator light (orange) comes on.

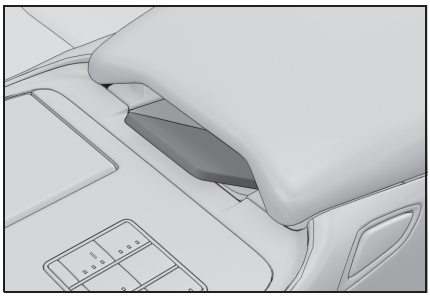
Refer to "Situations in which the function may not operate normally" when charging is not performed.(→P.376)

When charging is complete, the operation indicator light (green) comes on.



With the console box lid closed, a smartphone can be placed.

Depending on the situations, such as the size or shape of a smartphone, it may not be stored.



Recharging function

- When charging is complete and after a fixed time in the charge suspension state,charging restarts.
- When a portable device is moved significantly in the charging area, the charging coil is disconnected and charging is stopped momentarily. However, if there is the center of a charging coil in the charging area, the charging coil inside the wireless charger will move toward it and then charging restarts.

Rapid charging function

The following portable devices support rapid charging.

- Portable devices compliant with WPC Ver 1.3.2 and compatible with rapid charging
- iPhone's with an iOS version that supports 7.5 W charging (iPhone 8 and later models)
- Portable devices compatible with Galaxy original rapid charging standard

When a portable device that supports rapid charging is charged, charging automatically switches to the rapid charging function.

■ **Operation indicator light status**

Operation indicator light		Conditions
Charging tray	Center display	
Turning off	Disappear	When the Multimedia system power supply is off or the engine switch is in OFF.
Green (comes on)	Gray	On Standby (charging possible state)*1
		When charging is complete*2
Orange (comes on)	Blue	Charging

*1: Charging power will not be output during standby. A metallic object will not be heated, if it is placed on the charging area in this state.

*2: Depending on the portable device, there are cases where the operation indicator light will continue being lit up orange even after the charging is complete.

■ **The wireless charger is not working properly**

The following are situations in which the wireless charger does not work properly and how to deal with the possible causes.

Operation indicator light		Suspected causes/Handling method
Charging tray	Center display	
Orange (Flashing repeatedly once every second)	Gray	Vehicle to wireless charger communication failure → **If the engine is operating, stop and then restart the engine.** If the engine switch is in ACCESSORY mode, start the engine. (→P.169)
Green (Flashing repeatedly once every second)	Disappear	Wireless charger and multimedia system communication failure → **If the engine is operating, stop and then restart the engine.** If the engine switch is in ACCESSORY mode, start the engine. (→P.169)
Green (comes on)	Blue	The smart access system with push-button start is detecting the key. → **Wait until key detection has completed.**

Operation indicator light		Suspected causes/Handling method
Charging tray	Center display	
Green (comes on)	Gray	Foreign substance detection: A metallic foreign substance is in the charging area, and so the abnormal heating prevention function of the metallic foreign substance operated → **Remove the foreign substance from the charge area.**
		Portable device misaligned / distanced from charging surface: The center of charging coil in the portable device moved outside of the charging area, or lens convex is large, or case is thick so the abnormal heating prevention function operated → **Remove the portable device from the wireless charger, after 5 seconds, then place the portable device so that it is near the center of the wireless charger.Also, if a case or cover is installed to the portable device, remove it.**
		Battery protection function of portable device: Before full charging, battery protection function of portable device operated → **Confirm the setting of portable device.**
		Continued detection of an electronic key: When a Multimedia function is used through vehicle customization, the electronic key is continually detected without being confirmed. → **In this case, turn the engine switch ACCESSORY or IGNITION ON mode to confirm the key.**
Orange (Repeatedly flashes 4 times continuously)	Gray	Safety shutdown resulting when the temperature within the wireless charger exceeded the set value → **Stop charging, remove the portable device from the charging tray, wait for the temperature to drop, and then start charging again.**

■ **The wireless charger can be operated when**

The engine switch is in ACCESSORY or IGNITION ON mode.

■ **Usable portable devices**

● Qi standard wireless charge standard can be used on compatible devices.

However, compatibility with portable devices that comply with Qi Ver. 1.0, 1.3.2 and later versions is not guaranteed.

- Starting with mobile phones and smartphones, it is aimed for low power electrically supplied portable devices of no more than 5W.

However, charging exceeding 5 W is supported by the following portable devices.

- Charging at 7.5 W or less is supported by iPhone's that support 7.5 W charging.
- Charging at 10 W or less is supported by Galaxy device that support 10 W charging of original standard.
- Charging at 15 W or less is supported by portable devices compliant with EPP output as defined by WPC standard Ver1.3.2.

■ Using the smart access system with push-button start

If the smart access system with push-button start detects the key while a device is being charged, charging will be temporarily stopped.

■ When covers and accessories are attached to portable devices

Do not charge in situations where cover and accessories not able to handle Qi are attached to the portable device. Depending on the type of cover (including for certain genuine manufacturer parts) and accessory, it may not be possible to charge. When charging is not performed even with the portable device placed on the charge area, remove the cover and accessories.

■ Important points of the wireless charger

- If the electronic key cannot be detected within the vehicle interior, charging cannot be done. When the door is opened and closed, charging may be temporarily suspended.
- When charging, the wireless charging device and portable device will get warmer, however this is not a malfunction. When a portable device gets warm while charging, charging may stop due to the protection function on the portable device side. In this case, when the temperature of the portable device drops significantly, charge again.

The fan may start operating to lower the temperature inside the wireless charger, however this is not a malfunction.

■ Operation sounds

A buzzing noise may be heard when pressing the engine switch to turn to ACCESSORY or IGNITION ON mode or when detecting a portable device. However, this is not a malfunction.

■ Cleaning the wireless charger

→P.398

■ Situations in which the function may not operate normally

Devices may not be charged normally in the following situations.

- The portable device is fully charged
- The portable device is being charged with a cable connected
- There is foreign matter between the charge area and portable device
- Charging has caused the portable device to heat up
- The temperature around the charging tray is 35°C (95°F) or higher, such as in extreme heat
- The portable device is placed with its charging side facing up
- The small portable device such as foldable type is placed in an area misaligned from the charge area
- The portable device is larger than the charging tray
- The camera lens protrudes 3 mm (0.12 in) or more from the surface of the portable device
  Ex) iPhone13 pro, iPhone13 pro Max
- The vehicle is in an area where strong electrical waves or noise are emitted, such as near a television tower, power plant, gasoline station, broadcasting station, large display, airport, etc.
- When the any of the following objects, are between the charging surface of a portable device and the charging are:
  - Thick cases or covers
  - Thick decorations
  - Accessories, such as finger rings, straps,

etc.
- A case or cover with convex shape around the camera lens

● When the portable device is in contact with, or is covered by any of the following metallic objects:
- A card that has metal on it, such as aluminum foil, etc.
- A pack of cigarettes that includes aluminum foil
- A wallet or bag that is made of metal
- Coins
- A heating pad
- CDs, DVDs or other media
- A accessory made of metal
- A case or cover made of metal
- Casing which has magnet in it on the charging side of the portable device

● Electric wave type wireless remote controls are being used nearby

● The electronic key is not inside the vehicle

● 2 or more portable devices are placed on the charging tray at the same time

● In case of using device built in S-pen (Galaxy "Note" series etc.), device that inserted S-pen is placed on the tray

In situations other than above, if the wireless charger does not operate properly or the operation indicator light blinks continuously, the wireless charger may be malfunctioning.

Contact your Lexus dealer.

■ If the smartphone OS has been updated

If the smartphone OS has been updated to a newer version, its charging specifications may have changed significantly. For details, check the information on the manufacturer's website.

■ Trademark information

● iPhone is a trademark of Apple Inc., registered in the U.S. and other countries.

● Galaxy is a trademark or registered trademark of Samsung Electronics Co.,Ltd.

WARNING

■ Caution while driving

When charging a portable device, for safety reasons, the driver should not operate the main part of the portable device while driving.

■ Precautions for when driving

● Do not charge small, lightweight portable devices, such as wireless earbuds, while driving. Lightweight devices may fly off of the charging tray, possibly leading to an accident.

● Keep the console box closed. Injuries may result in the event of an accident or sudden braking.

● Make sure that a smartphone stored in the front portion will not interfere with the shifting operation. If your hand is caught by the stored smartphone while shifting, a mis-shift may occur, possibly leading to an accident.

■ Caution regarding interference with electronic devices

People with implantable cardiac pacemakers, cardiac resynchronization therapypacemakers or implantable cardioverters, as well as any other electrical medical device, should consult their physician about the usage of the wireless charger.

Operations of the wireless charger may have an affect on medical devices.

■ To prevent malfunctions or burns

Observe the following precautions.

Failure to do so may result in a equipment failure and damage, catch fire, burns due to overheat or electric shock.

● Do not insert any metallic objects between the charge area and the portable device while charging.

WARNING

- Do not attach an aluminum sticker or other metallic object to the charge area.
- Do not attach an aluminum sticker or other metallic object to the side of the portable device (or to its case or cover) that touches the charge area.
- Do not use the charging tray as a small storage space.
- Do not subject to a strong force or impact.
- Do not disassemble, modify or remove.
- Do not charge devices other than specified portable devices.
- Keep away from magnetic items.
- Do not charge devices if the charge area is covered in dust.
- Do not cover with a cloth or similar material.

NOTICE

■ To prevent trouble and data damage

- When charging, bringing a credit, or other magnetic card, or magnetic storage media close to the charge area may clear any stored data due to magnetic influence. Also, do not bring a wristwatch or other precision instrument close to the charge area since doing so may cause it to malfunction.
- Do not charge with a non-contact IC card such as a transportation system IC card inserted between the charging side of a portable device and the charge area. The IC chip may become extremely hot and damage the portable device or IC card. Be especially careful not to charge a portable device inside a case or cover with a noncontact IC card attached.
- Do not leave portable devices inside the vehicle. The inside of the vehicle can become hot in extreme heat, which could cause a malfunction.

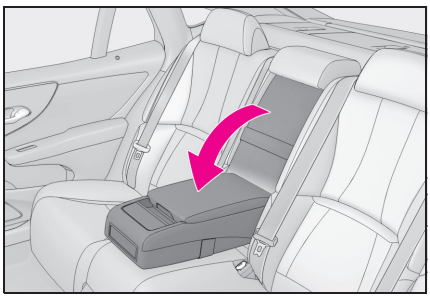
■ To prevent battery discharge

Do not use the wireless charger for a long period of time with the engine stopped.

Armrest

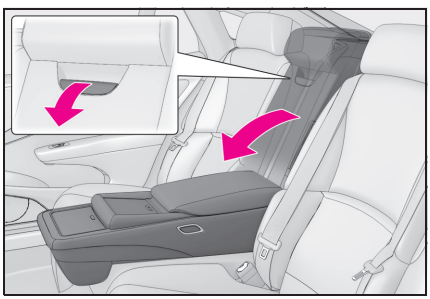
▶ Vehicle without power rear seat

Pull the armrest down for use.



▶ Vehicle with power rear seat

Pull the lock release lever and fold the rear seatback down.



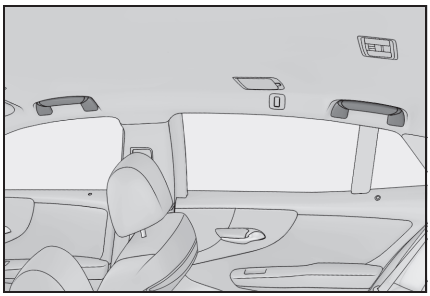
NOTICE

■ To prevent damage to the armrest

Do not place too much strain on the armrest.

Assist grips

An assist grip installed on the ceiling can be used to support your body while sitting on the seat.



WARNING

■ **Assist grip**

Do not use the assist grip when getting in or out of the vehicle or rising from your seat.
Doing so could damage the assist grip, or could cause you to injure yourself by falling over.

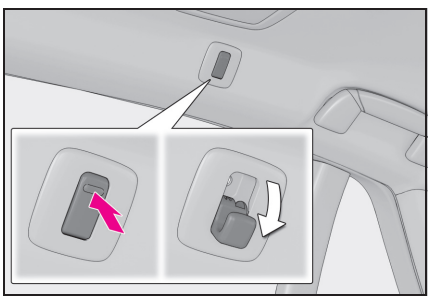
NOTICE

■ **To prevent damage to the assist grip**

Do not hang any heavy object or put a heavy load on the assist grip.

Coat hooks

To use the coat hook, push it on.



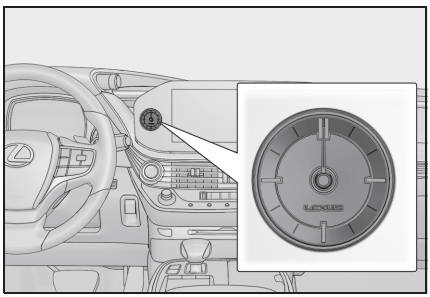
WARNING

■ **Items that must not be hung on the hook**

Do not hang a coat hanger or other hard or sharp object on the hook. If the SRS curtain shield airbags deploy, these items may become projectiles that cause death or serious injury.

Clock

The GPS clock's time is automatically adjusted by utilizing GPS time information. For details, refer to "MULTIMEDIA OWNER'S MANUAL".



Power outlets

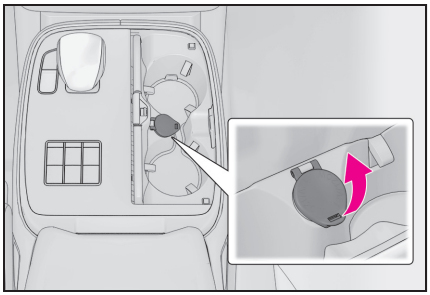
The power outlet can be used for the following components:

12 V: Accessories that run on less than 10 A.
120 VAC: Accessories that use less than 100 W.

■ **12 V**

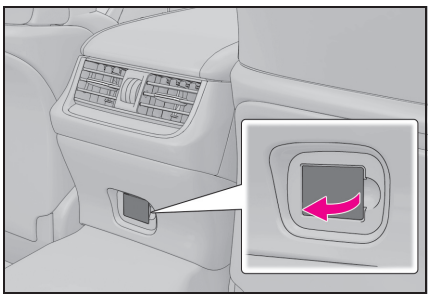
▶ Front

Open the lid.



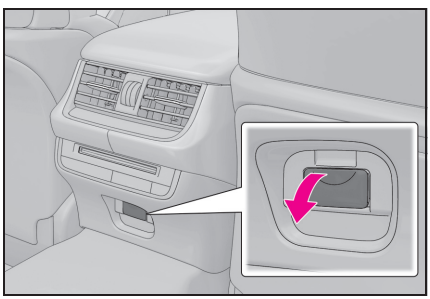
▶ Rear (if equipped)

Open the lid.



■ 120 VAC (if equipped)

Open the lid.



■ The power outlet can be used when

●12 V

The engine switch is in ACCESSORY or IGNITION ON mode.

●120 VAC

The engine switch is in IGNITION ON mode.

NOTICE

■ To avoid damaging the power outlet

Close the power outlet lid when the power outlet is not in use.
Foreign objects or liquids that enter the power outlet may cause a short circuit.

■ To prevent the fuse from being blown

●12 V

Do not use an accessory that uses more than 12 V 10 A.

●120 VAC

Do not use a 120 VAC appliance that requires more than 100 W. If a 120 VAC appliance that consumes more than 100 W is used, the protection circuit will cut the power supply.

■ To prevent incorrect operation of the vehicle

When turning the engine switch off, make sure to disconnect accessories designed for charging, such as portable chargers, power banks, etc. from the power outlets.

If such an accessory is left connected, the following may occur:

- The doors cannot be locked using the smart access system with push-button start or wireless remote control.
- The opening screen will be displayed on the multi-information display.
- The interior lights, instrument panel lights, etc. will illuminate.

■ To prevent the battery from being discharged

Do not use the power outlet longer than necessary when the engine is not running.

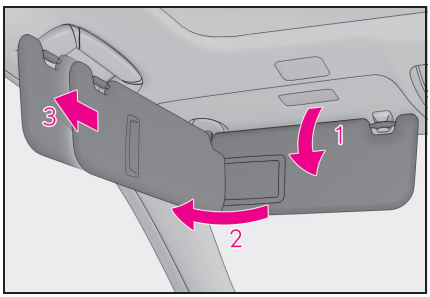
NOTICE

■ **Appliances that may not operate properly (120 VAC)**

The following 120 VAC appliances may not operate properly even if their power consumption is under 100 W.

- Appliances with high initial peak wattage
- Measuring devices that process precise data
- Other appliances that require an extremely stable power supply

Sun visors



1 To set the visor in the forward position, flip it down.

2 To set the visor in the side position, flip down, unhook, and swing it to the side.

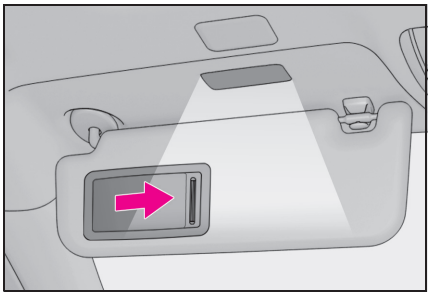
3 To use the side extender, place the visor in the side position, then slide it backward.

Vanity mirrors

▶ Front

Slide the cover to open.

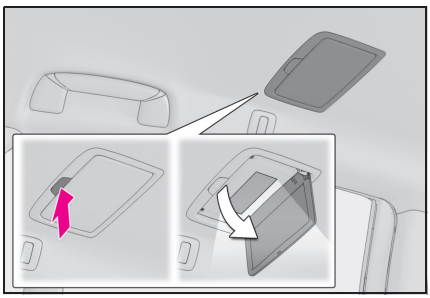
The vanity light turns on.



▶ Rear

Press the button to open.

The vanity light turns on.



■ **To prevent battery discharge**

If the vanity lights remain on when the engine switch is turned off, the lights will go off automatically after 20 minutes.

NOTICE

■ **When not in use**

Keep the rear vanity mirror closed.

■ **To prevent the battery from being discharged**

Do not leave the vanity lights on for extended periods while the engine is stopped.

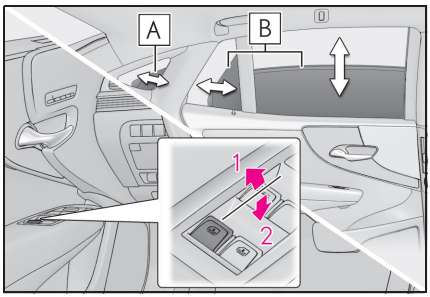
Rear door/rear quarter sunshades (if equipped)

The rear door/rear quarter sunshades can be extended and retracted using

the driver's power window switch and Rear Multi Operation Panel.

■ **From driver's seat**

Operate the driver's power window switch.



A Rear quarter sunshade (if equipped)

B Rear door sunshade

1 Extend

2 Retract*

*: If the driver's power window switch is operated when a rear door sunshade/rear quarter sunshade is retracted or being retracted, the rear window will open.

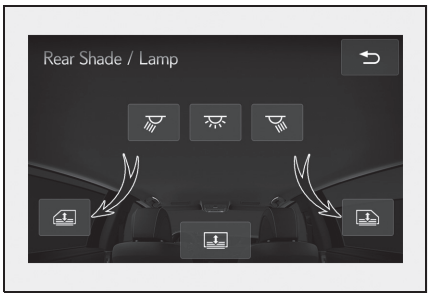
■ **From rear seat**

The rear seat power window switches cannot be used to extend the rear door sunshades/rear quarter sunshades.

▶ Rear shade/lamp control screen

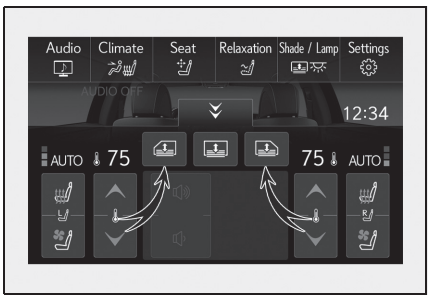
1 Display the home screen and then touch "Shade/Lamp". (→P.340)

2 To fully extend/retract a rear door/rear quarter sunshade, touch the respective button.



▶ Shortcut screen

To fully extend/retract a rear door/rear quarter sunshade, touch the respective button.



■ **Operating conditions**

- The engine switch is in IGNITION ON mode.
- The rear side windows are fully closed.

■ **Operation of rear door sunshades/rear quarter sunshades when extended**

If a rear door power window switch is operated when the rear door sunshade/rear quarter sunshade is extended, the rear door sunshade/rear quarter sunshade will retract while the rear window is opening.

■ **Operating the rear door/rear quarter sunshades after turning the engine switch off**

The rear door/rear quarter sunshades can be operated for a while even after the engine switch is turned to ACCESSORY

mode or off.
However, they cannot be operated using the driver's power window switch after either front door is opened.

■ **Jam protection function**

If an object becomes caught between a rear door sunshade and the window frame, the rear door sunshade will stop and then extend/retract slightly.

■ **When reconnecting the battery**

The rear door/rear quarter sunshades will always be retracted the first time the button is pressed.

WARNING

■ **When the rear door/rear quarter sunshades are being extended or retracted**

Do not place fingers or other objects in the shade mechanism or in the opening as injury may result.

■ **Jam protection function**

Never use any part of your body to intentionally activate the jam protection function.

NOTICE

■ **To ensure normal operation of the sunshades**

Observe the following precautions:

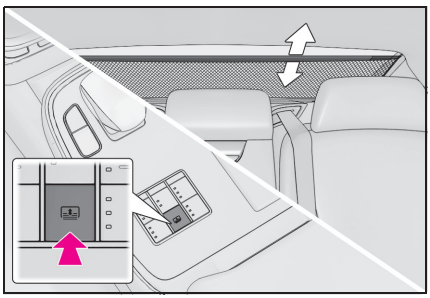
- Do not place excessive load on the motor or other components.
- Do not place objects where they may hinder opening and closing operations.
- Do not attach items to the rear door/rear quarter sunshades.
- Keep the opening clean and clear of obstructions.
- Do not operate the rear door/rear quarter sunshades continuously for long periods of time.

Rear sunshade

The rear sunshade can be can be extended and retracted using the rear sunshade switch and Rear Multi Operation Panel.

■ **From front seat**

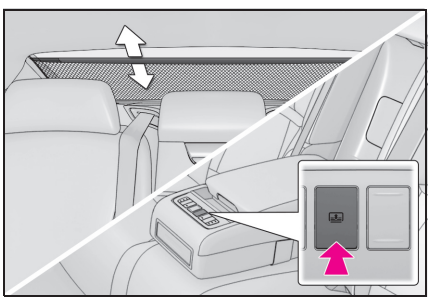
Extend/retract



■ **From rear seat**

▶ Vehicles without power rear seat

Extend/retract



▶ Vehicles with power rear seat (Rear shade/lamp control screen)

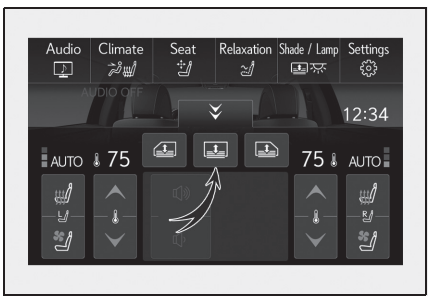
1 Display the home screen and then touch "Shade/Lamp". (→P.340)

2 To fully extend/retract a rear door sunshade, touch the respective button.



▶ Vehicles with power rear seat (shortcut screen)

To fully extend/retract a rear door sunshade, touch the respective button.



The rear sunshade can be used when

The engine switch is in IGNITION ON mode.

Operating the rear sunshade after turning the engine switch off

The rear sunshade can be operated for a while even after the engine switch is switched to ACCESSORY mode or turned off.

Reverse operation feature

To ensure adequate rear visibility, the rear sunshade automatically lowers when the shift position is shifted to R.

However, the rear sunshade is raised again if any of the following occurs:

- The switch is pressed again.
- The shift position is shifted to P.
- The shift position is shifted out of P and R, and the vehicle reaches a speed of 9 mph (15 km/h).

If the engine is turned off when the rear sunshade has been lowered due to the reverse operation feature, it will not be raised even when the engine is turned on again and the vehicle reaches a speed of 9 mph (15 km/h). To raise the sunshade again, press the switch.

WARNING

When the rear sunshade is being extended or retracted

Do not place fingers or other objects in the shade mechanism or in the opening as injury may result.

NOTICE

To ensure normal operation of the sunshade

Observe the following precautions:

- Do not place excessive load on the motor or other components.
- Do not place objects where they may hinder opening and closing operations.
- Do not attach items to the rear sunshade.
- Keep the opening clean and clear of obstructions.
- Do not operate the rear sunshade continuously for long periods of time.

Garage door opener

The garage door opener can be programmed using the HomeLink® to operate garage doors, gates, entry doors, door locks, home lighting systems, security systems, and other devices.

HomeLink® programming procedure

The programming procedures can also be found at the following URL.

Website: www.homelink.com/lexus

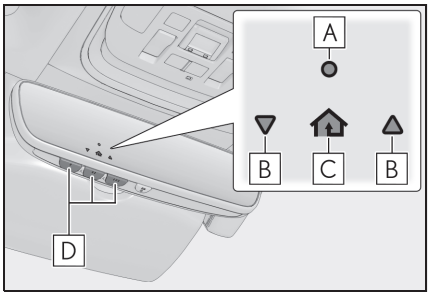
For support, contact customer support at the following.

Help Line: 1-800-355-3515

System components

The HomeLink® wireless control system in your vehicle has 3 buttons which can be programmed to operate 3 different devices. Refer to the programming methods on the following pages to determine the method which is appropriate for the device.

- Vehicles with auto anti-glare inside rear view mirror



A HomeLink® indicator light

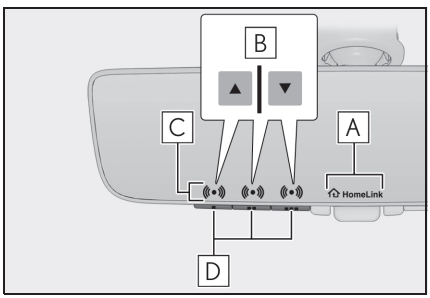
B Garage door operation indicators

C HomeLink® icon

Illuminates while HomeLink® is operating.

D Buttons

- Vehicles with Digital Rearview Mirror



A HomeLink® logo

Appears while HomeLink® is operating. When the menu button (→P.135) is pressed, the logo disappears even while the HomeLink® is operating.

B Garage door operation indicators

C HomeLink® indicator light

Illuminates above each button selected.

D Buttons

■ Codes stored in the HomeLink® memory

- The registered codes are not erased even if the battery cable is disconnected.
- If learning failed when registering a different code to a HomeLink® button that already has a code registered to it, the already registered code will not be erased.

WARNING

■ When programming a garage door or other remote control device

The garage door or other device may operate, so ensure people and objects are out of danger to prevent potential harm.

■ Conforming to federal safety standards

Do not use the HomeLink® compatible transceiver with any garage door opener or device that lacks safety stop and reverse features as required by federal safety standards.

This includes any garage door that cannot detect an interfering object. A door or device without these features increases the risk of death or serious injury.

■ When operating or programming HomeLink®

Never allow a child to operate or play with the HomeLink® buttons.

Programming the HomeLink®

■ Before programming HomeLink®

- During programming, it is possible that garage doors, gates, or other devices may operate. For this reason, make sure that people and objects are clear of the garage door or other devices to prevent injury or other potential harm.
- It is recommended that a new battery be placed in the remote control transmitter for more accurate programming.
- Garage door opener motors manufactured after 1995 may be equipped with rolling code protection. If this is the case, you may need a stepladder or other sturdy, safe device to reach the "Learn" or "Smart" button on the garage door opener motor.

■ Programming HomeLink®

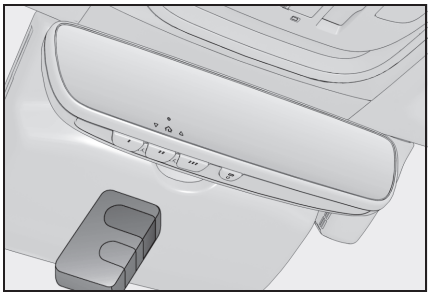
Steps **1** through **3** must be performed within 60 seconds, otherwise the HomeLink® indicator light will stop flashing and programming will not be successfully completed.

1 Press and release the HomeLink® button you want to program and check that the HomeLink® indicator light flashes (orange).

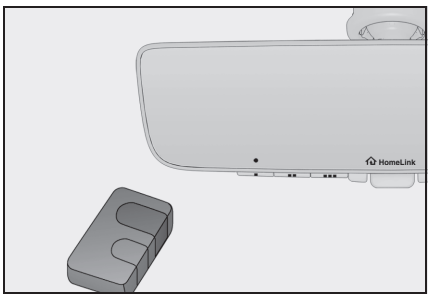
2 Point the remote control transmitter for the device at the rear view mirror, 1 to 3 in. (25 to 75 mm) from the HomeLink® buttons.

Keep the HomeLink® indicator light in view while programming.

▶ Vehicles with auto anti-glare inside rear view mirror

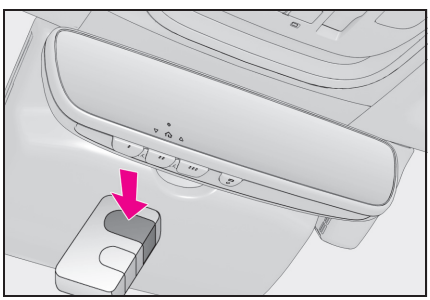


▶ Vehicles with Digital Rearview Mirror

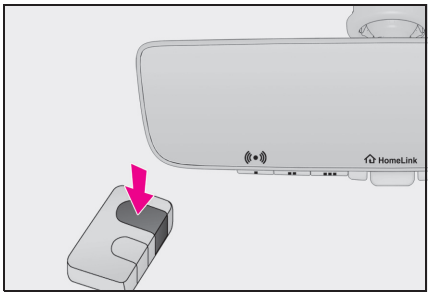


3 Program a device.

▶ Vehicles with auto anti-glare inside rear view mirror



▶ Vehicles with Digital Rearview Mirror



▶ Programming a device other than an entry gate (for U.S.A. owners)

Press and hold the remote control transmitter button until the HomeLink® indicator light changes from slowly flashing orange to rapidly flashing green (rolling code) or continuously lit green (fixed code), then release the button.

▶ Programming an entry gate (for U.S.A. owners)/Programming a device in the Canadian market

Press and release the remote control transmitter button at 2 second intervals, repeatedly, until the HomeLink® indicator light changes from slowly flashing (orange) to rapidly flashing (green) (rolling code) or continuously lit (green) (fixed code).

4 Test the HomeLink® operation by pressing the newly programmed button and observing the indicator light:

- HomeLink® indicator light illuminates: Programming of a fixed code device has completed. The garage door or other device should operate

when a HomeLink® button is pressed and released.

- HomeLink® indicator light flashes rapidly: The garage door opener motor or other device is equipped with a rolling code. To complete programming, firmly press and hold the HomeLink® button for 2 seconds then release it.
- If the garage door or other device does not operate, proceed to "Programming a rolling code system".

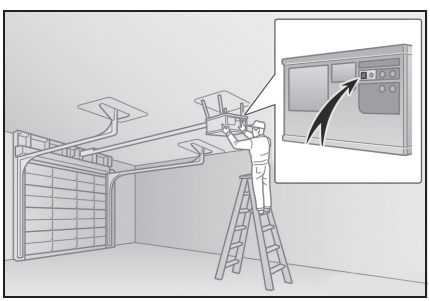
5 Repeat the steps above to program another device for any of the remaining HomeLink® buttons.

■ Programming a rolling code system

Two or more people may be necessary to complete rolling code programming.

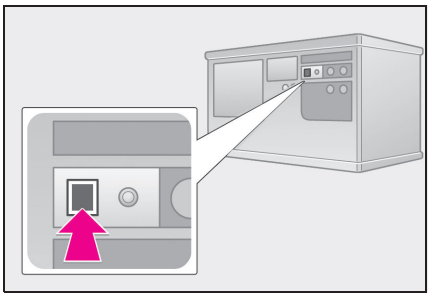
1 Locate the "Learn" or "Smart" button on the garage door opener motor in the garage.

This button can usually be found where the hanging antenna wire is attached to the unit. The name and color of the button may vary by manufacturer. Refer to the owner's manual supplied with the garage door opener motor for details.



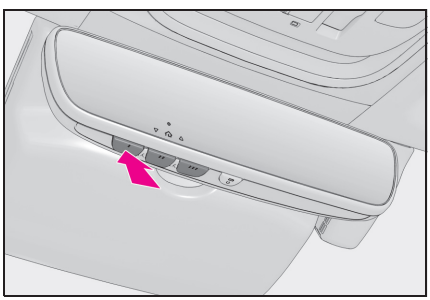
2 Press and release the "Learn" or "Smart" button.

Perform **3** within 30 seconds after performing **2**.

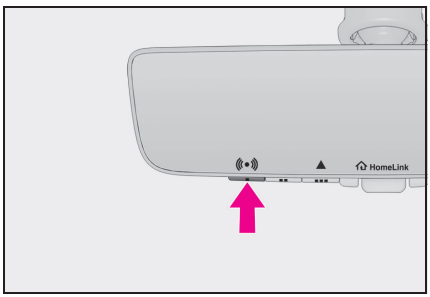


3 Press and hold the desired HomeLink® button (inside the vehicle) for 2 seconds and release it. Repeat this sequence (press/hold/release) up to 3 times to complete programming.
If the garage door opener motor operates when the HomeLink® button is pressed, the garage door opener motor recognizes the HomeLink® signal.

▶ Vehicles with auto anti-glare inside rear view mirror



▶ Vehicles with Digital Rearview Mirror



■ Enabling 2-way communication with a garage door (only available for compatible devices)

When enabled, 2-way communication allows you to check the status of the opening and closing of a garage door through indicators in your vehicle.

2-way communication is only available if the garage door opener motor used is a compatible device. (To check device compatibility, refer to www.homelink.com.)

1 Within 5 seconds after programming the garage door opener has been completed, if the garage door opener motor is trained to HomeLink®, both garage door operation indicators will flash rapidly (green) and the light on the garage door opener motor will blink twice, indicating that 2-way communication is enabled.

If the indicators do not flash, perform **2** and **3** within the first 10 presses of the HomeLink® button after programming has been completed.

2 Press a programmed HomeLink® button to operate a garage door.

3 Within 1 minute of pressing the HomeLink® button, after the garage door operation has stopped, press the "Learn" or "Smart" button on the garage door opener motor. Within 5 seconds of the establishment of 2-way communication with the garage door opener, both garage door operation indicators in the vehicle will flash rapidly (green) and the light on the garage door opener motor will blink twice, indicating that 2-way communication is enabled.

■ Reprogramming a single HomeLink® button

When the following procedure is performed, buttons which already have devices registered to them can be overwritten:

1 Press and hold the desired HomeLink® button.

2 When the HomeLink® indicator starts flashing orange, release the HomeLink® button and perform "Programming HomeLink®" **1** (it takes 20 seconds for the HomeLink® indicator to start flashing).

■ Before programming

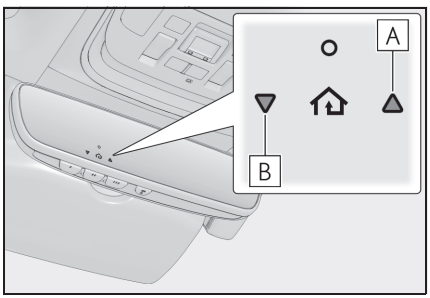
- Install a new battery in the transmitter.
- The battery side of the transmitter must be pointed away from the HomeLink®buttons.

Operating HomeLink®

Press the appropriate HomeLink® button. The HomeLink® indicator light should turn on.

The status of the opening and closing of a garage door is shown by the garage door opener indicators.

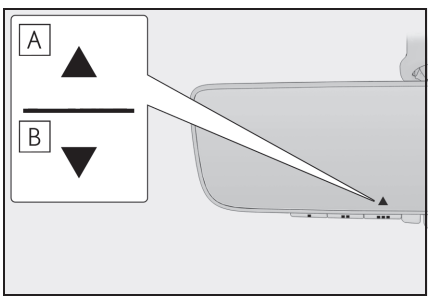
▶ Vehicles with auto anti-glare inside rear view mirror



A Opening

B Closing

▶ Vehicles with Digital Rearview Mirror



A Opening

B Closing

This function is only available if the garage door opener motor used is a compatible device. (To check device compatibility, refer to www.homelink.com.)

Color	Status
Orange (flashing)	Currently opening/closing
Green	Opening/closinghas completed
Red (flashing)	Feedback signals cannot be received

The indicators can operate within approximately 820 ft. (250 m) of the garage door. However, if there are obstructions between the garage door and the vehicle, such as houses and trees, feedback signals from the garage door may not be received.

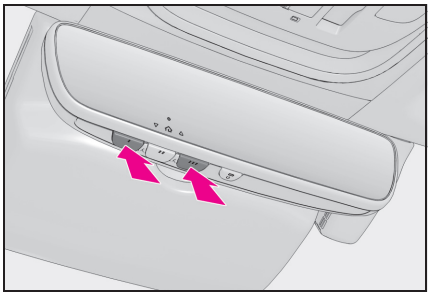
To recall the previous door operation status, press and release either HomeLink® buttons and or and (vehicles with auto anti-glare inside rear view mirror), and or and (vehicles with Digital Rearview Mirror), simultaneously. The last recorded status will be displayed for 3 seconds.

Erasing the entire HomeLink® memory (all three codes)

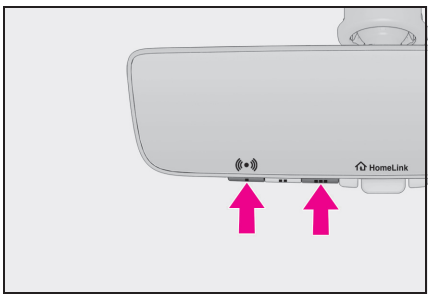
Press and hold the 2 outside buttons for 10 seconds until the HomeLink® indicator light changes from continuously lit (orange) to rapidly flashing (green).

If you sell your vehicle, be sure to erase the programs stored in the HomeLink® memory.

▶ Vehicles with auto anti-glare inside rear view mirror



▶ Vehicles with Digital Rearview Mirror



6-1. Maintenance and care

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6-2. Maintenance

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Battery 417

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Wheels 436

Air conditioning filter 438

Electronic key battery 439

Checking and replacing fuses 441

Headlight aim 444

Light bulbs 445

Cleaning and protecting the vehicle exterior

Perform cleaning in a manner appropriate to each component and its material.

Cleaning instructions

- Working from top to bottom, liberally apply water to the vehicle body, wheel wells and underside of the vehicle to remove any dirt and dust.
- Wash the vehicle body using a sponge or soft cloth, such as a chamois.
- For hard-to-remove marks, use car wash soap and rinse thoroughly with water.
- Wipe away any water.
- Wax the vehicle when the waterproof coating deteriorates.

If water does not bead on a clean surface, apply wax when the vehicle body is cool.

■ Self-restoring coat

The vehicle body has a self-restoring coating that is resistant to small surface scratches caused in a car wash etc.

- The coating lasts for 5 to 8 years from when the vehicle is delivered from the plant.
- The restoration time differs depending on the depth of the scratch and outside temperature.
  The restoration time may become shorter when the coating is warmed by applying warm water.
- Deep scratches caused by keys, coins, etc. cannot be restored.
- Do not use wax that contains abrasives.

■ Automatic car washes

- Before washing the vehicle:
  - Fold the mirrors
  - Turn off the power trunk opener and closer (if equipped)

Start washing from the front of the vehicle. Extend the mirrors before driving.

- Brushes used in automatic car washes may scratch the vehicle surface, parts (wheel, etc.) and harm your vehicle's paint.
- When the shift position needs to be held in N, refer to P.178.

■ High pressure car washes

As water may enter the cabin, do not bring the nozzle tip near the gaps around the doors or perimeter of the windows, or spray these areas continuously.

■ When using a car wash

If the door handle becomes wet while the electronic key is within the effective range, the door may lock and unlock repeatedly. In that case, follow the following correction procedures to wash the vehicle:

- Place the key in a position 6 ft. (2 m) or more separate from the vehicle while the vehicle is being washed. (Take care to ensure that the key is not stolen.)
- Set the electronic key to battery-saving mode to disable the smart access system with push-button start. (→P.109)

■ Wheels and wheel ornaments

- Remove any dirt immediately by using a neutral detergent.
- Wash detergent off with water immediately after use.
- To protect the paint from damage, make sure to observe the following precautions.
  - Do not use acidic, alkaline or abrasive detergent
  - Do not use hard brushes
  - Do not use detergent on the wheels when they are hot, such as after driving or parking in hot weather

■ Brake pads and calipers

Rust may form if the vehicle is parked with

wet brake pads or disc rotors, causing them to stick. Before parking the vehicle after it is washed, drive slowly and apply the brakes several times to dry the parts.

■ **Brake caliper coating (F SPORT models)**

- When using detergent, use neutral detergent. Do not use hard brushes or abrasive cleaners, as they will damage the coating.
- Do not use detergent on the brake calipers when they are hot.
- Wash detergent off immediately after use.

■ **Bumpers and side moldings**

Do not scrub with abrasive cleaners.

■ **Front side windows water-repellent coating (if equipped)**

The following precautions can extend the effectiveness of the water-repellent coating.

- Remove any dirt, etc. from the front side windows regularly.
- Do not allow dirt and dust to accumulate on the windows for a long period. Clean the windows with a soft, damp cloth as soon as possible.
- Do not use wax or glass cleaners that contain abrasives when cleaning the windows.
- Do not use any metallic objects to remove condensation build up.

■ **Plated portions**

If dirt cannot be removed, clean the parts as follows:

- Use a soft cloth dampened with an approximately 5% solution of neutral detergent and water to clean the dirt off.
- Wipe the surface with a dry, soft cloth to remove any remaining moisture.
- To remove oily deposits, use alcohol wet wipes or a similar product.

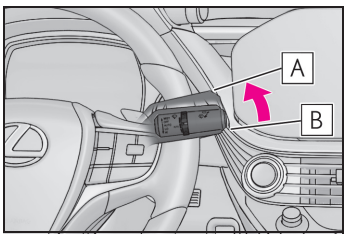
WARNING

■ **When washing the vehicle**

Do not apply water to the inside of the engine compartment. Doing so may cause the electrical components, etc. to catch fire.

■ **When cleaning the windshield**

Set the wiper switch to off.
If the wiper switch is in "AUTO", the wipers may operate unexpectedly in the following situations, and may result in hands being caught or other serious injuries and cause damage to the wiper blades.



A Off

B AUTO

- When the upper part of the windshield where the raindrop sensor is located is touched by hand
- When a wet rag or similar is held close to the raindrop sensor
- If something bumps against the windshield
- If you directly touch the raindrop sensor body or if something bumps into the raindrop sensor

WARNING

■ Precautions regarding the exhaust pipes and rear bumper diffusers

Exhaust gases cause the exhaust pipes and rear bumper diffusers to become quite hot.
When washing the vehicle, be careful not to touch the pipes and diffusers until they have cooled sufficiently, as touching hot exhaust pipes and rear bumper diffusers can cause burns.

■ Precaution regarding the front and rear bumpers

If the paint of the front or rear bumper is chipped or scratched, the following systems may not function correctly. If this occurs, consult your Lexus dealer.

- Lexus Safety System + 3
- BSM
- RCTA
- SEA
- PKSB (if equipped)
- Intuitive parking assist (if equipped)

NOTICE

■ To prevent paint deterioration and corrosion on the body and components (aluminum wheels, etc.)

- Wash the vehicle immediately in the following cases:
  - After driving near the sea coast
  - After driving on salted roads
  - If coal tar or tree sap is present on the paint surface
  - If dead insects, insect droppings or bird droppings are present on the paint surface
  - After driving in an area contaminated with soot, oily smoke, mine dust, iron powder or chemical substances
  - If the vehicle becomes heavily soiled with dust or mud
  - If liquids such as benzene and gasoline are spilled on the paint surface
- If the paint is chipped or scratched, have it repaired immediately.
- To prevent the wheels from corroding, remove any dirt and store in a place with low humidity when storing the wheels.

■ Cleaning the exterior lights

- Wash carefully. Do not use organic substances or scrub with a hard brush. This may damage the surfaces of the lights.
- Do not apply wax to the surfaces of the lights.
  Wax may cause damage to the lenses.

■ When using an automatic car wash

Set the wiper switch to the off position.
If the wiper switch is in "AUTO", the wipers may operate and the wiper blades may be damaged.

■ When using a high pressure car wash

- When washing the vehicle, do not spray the camera or its surrounding area directly with a high pressure washer. Shock applied from high pressure water may cause the device to not operate normally.
- Do not spray water directly on the radar which is equipped behind the emblem. Otherwise it may cause the device to be damaged.

NOTICE

- Do not bring the nozzle tip close to boots (rubber or resin manufactured cover), connectors or the following parts. The parts may be damaged if they come into contact with high-pressure water.
  - Traction related parts
  - Steering parts
  - Suspension parts
  - Brake parts
- Keep the cleaning nozzle at least 11.9 in. (30 cm) away from the vehicle body. Otherwise resin section, such as moldings and bumpers, may be deformed and damaged.

Also, do not continuously hold the nozzle in the same place.

- Do not spray the lower part of the windshield continuously.

If water enters the air conditioning system intake located near the lower part of the windshield, the air conditioning system may not operate correctly.

- Do not wash the underside of the vehicle using a high pressure car washer.

Cleaning and protecting the vehicle interior

Perform cleaning in a manner appropriate to each component and its material.

Protecting the vehicle interior

- Remove dirt and dust using a vacuum cleaner. Wipe dirty surfaces with a cloth dampened with lukewarm water.
- If dirt cannot be removed, wipe it off with a soft cloth dampened with neutral detergent diluted to approximately 1%.
  Wring out any excess water from the cloth and thoroughly wipe off remaining traces of detergent and water.

Shampooing the carpets

There are several commercial foaming-type cleaners available. Use a sponge or brush to apply the foam. Rub in overlapping circles. Do not use water. Wipe dirty surfaces and let them dry. Excellent results are obtained by keeping the carpet as dry as possible.

Handling the seat belts

Clean with mild soap and lukewarm water using a cloth or sponge. Also check the belts periodically for excessive wear, fraying or cuts.

When cleaning the carpeted portions of the glove box, console box, etc.

If a strong adhesive tape is used, there is a possibility that the surface of the carpet could be damaged.

WARNING

Water in the vehicle

- Do not splash or spill liquid in the vehicle.
  Doing so may cause electrical components, etc. to malfunction or catch fire.
- Do not get any of the SRS components or wiring in the vehicle interior wet. (→P.30)
  An electrical malfunction may cause the airbags to deploy or not function properly, resulting in death or serious injury.

Cleaning the interior (especially instrument panel)

Do not use polish wax or polish cleaner. The instrument panel may reflect off the windshield, obstructing the driver's view and leading to an accident, resulting in death or serious injury.

NOTICE

Cleaning detergents

- Do not use the following types of detergent, as they may discolor the vehicle interior or cause streaks or damage to painted surfaces:
  - Areas other than the seats and steering wheel: Organic substances such as benzene or gasoline, alkaline or acidic solutions, dye, and bleach
  - Seats: Alkaline or acidic solutions, such as thinner, benzene, and alcohol
  - Steering wheel: Organic substances, such as thinner, and cleaner that contains alcohol
- Do not use polish wax or polish cleaner. The instrument panel's or other interior part's painted surface may be damaged.

Preventing damage to leather surfaces

Observe the following precautions to avoid damage to and deterioration of leather surfaces:

- Remove any dust or dirt from leather surfaces immediately.
- Do not expose the vehicle to direct sunlight for extended periods of time. Park the vehicle in the shade, especially during summer.
- Do not place items made of vinyl, plastic, or containing wax on the upholstery, as they may stick to the leather surface if the vehicle interior heats up significantly.

Water on the floor

Do not wash the vehicle floor with water. Vehicle systems such as the audio system may be damaged if water comes into contact with electrical components such as the audio system above or under the floor of the vehicle. Water may also cause the body to rust.

When cleaning the inside of the windshield

Do not allow glass cleaner to contact the lens. Also, do not touch the lens. (→P.198)

Cleaning the inside of the rear window

- Do not use glass cleaner to clean the rear window, as this may cause damage to the rear window defogger heater wires or antenna. Use a cloth dampened with lukewarm water to gently wipe the window clean. Wipe the window in strokes running parallel to the heater wires or antenna.
- Be careful not to scratch or damage the heater wires or antenna.

Cleaning the areas with satin-finish metal accents

- Remove dirt using a water-dampened soft cloth or synthetic chamois.
- Wipe the surface with a dry, soft cloth to remove any remaining moisture.

Cleaning the areas with satin-finish metal accents

The metal areas use a layer of real metal for the surface. It is necessary to clean them regularly. If dirty areas are left uncleaned for long periods of time, they may be difficult to clean.

Cleaning the leather areas

- Remove dirt and dust using a vacuum cleaner.
- Wipe off any excess dirt and dust with a soft cloth dampened with diluted detergent.

Use a diluted water solution of approximately 5% neutral wool detergent.

- Wring out any excess water from the cloth and thoroughly wipe off all remaining traces of detergent.
- Wipe the surface with a dry, soft cloth to remove any remaining moisture. Allow the leather to dry in a shaded and ventilated area.

Caring for leather areas

Lexus recommends cleaning the interior of the vehicle at least twice a year to maintain the quality of the vehicle's interior.

Cleaning the synthetic leather areas

- Remove dirt and dust using a vacuum cleaner.
- Wipe it off with a soft cloth dampened with neutral detergent diluted to approximately 1%.
- Wring out any excess water from the cloth and thoroughly wipe off remaining traces of detergent and water.

Cleaning fabric portions of the instrument panel

- To remove dust from the fabric, use a vacuum cleaner or adhesive tape.
- Use a cloth dampened with water to gently wipe the fabric clean.

Do not use detergents to clean the fabric.

Maintenance requirements

To ensure safe and economical driving, day-to-day care and regular maintenance are essential. It is the owner's responsibility to perform regular checks. Lexus recommends the maintenance below.

Repair and replacement

It is recommended that genuine Lexus parts be used for repairs to ensure performance of each system. If non-Lexus parts are used in replacement or if a repair shop other than a Lexus dealer performs repairs, confirm the warranty coverage.

Allow inspection and repairs to be performed by a Lexus dealer

- Lexus technicians are well-trained specialists and are kept up to date with the latest service information. They are well informed about the operation of all systems on your vehicle.
- Keep a copy of the repair order. It proves that the maintenance that has been performed is under warranty coverage. If any problem should arise while your vehicle is under warranty, your Lexus dealer will promptly take care of it.

WARNING

If your vehicle is not properly maintained

Improper maintenance could result in serious damage to the vehicle and possible death or serious injury.

Handling of the battery

- Engine exhaust, some of its constituents, and a wide variety of automobile components contain or emit chemicals known to the State of California to cause cancer and birth defects and other reproductive harm. Work in a well ventilated area.
- Oils, fuels and fluids contained in vehicles as well as waste produced by component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Avoid exposure and wash any affected area immediately.
- Battery posts, terminals and related accessories contain lead and lead compounds which are known to cause brain damage. Wash your hands after handling. (→P.417)

General maintenance

General maintenance should be performed on a daily basis. This can be done by yourself or by a Lexus dealer.

Scheduled maintenance

Scheduled maintenance should be performed at specified intervals according to the maintenance schedule.

For details about maintenance items and schedules, refer to the "Warranty and Service Guide", "Owner's Manual Supplement" or "Scheduled Maintenance".

Resetting the message indicating maintenance is required

After the required maintenance is performed according to the maintenance schedule, please reset the message.
To reset the message, follow the procedure described below:

1. Select ⚙ on the center display.
2. Select "Vehicle customize".
3. Select "Utility".
4. Select "Scheduled maintenance".
5. Select "Reset".

A message will be displayed on the center

display when the reset procedure has been completed.

Do-it-yourself maintenance

You can perform some maintenance procedures by yourself.
Please be aware that do-it-yourself maintenance may affect warranty coverage.

The use of Lexus repair manuals is recommended.

For details about warranty coverage, refer to the separate "Owner's Guide", "Warranty and Service Guide", "Owner's Manual Supplement" or "Warranty Booklet".

General maintenance

Listed below are the general maintenance items that should be performed at the intervals specified in the "Warranty and Service Guide" or "Owner's Manual Supplement". It is recommended that any problem you notice should be brought to the attention of your Lexus dealer or qualified service shop for advice.

WARNING

■ If the engine is running

Turn the engine off and ensure that there is adequate ventilation before performing maintenance checks.

Engine compartment

Items	Check points
Brake fluid	Is the brake fluid at the correct level? (→P.415)
Engine/intercooler coolant	Is the engine/intercooler coolant at the correct level? (→P.414)
Engine oil	Is the engine oil at the correct level? (→P.412)
Exhaust system	There should not be any fumes or strange sounds.

Items	Check points
Radiator, condenser, intercooler radiator and intercooler sub radiator	The radiator, condenser, intercooler radiator and intercooler sub radiator should be free from foreign objects. (→P.415)
Washer fluid	Is there sufficient washer fluid? (→P.416)

Trunk

Items	Check points
Battery	Check the connections. (→P.417)

Vehicle interior

Items	Check points
Accelerator pedal	• The accelerator pedal should move smoothly (without uneven pedal effort or catching).
Automatic transmission "Park" mechanism	• When parked on a slope and the shift position is in P, is the vehicle securely stopped?
Brake pedal	• Does the brake pedal move smoothly? • Does the brake pedal have appropriate clearance from the floor? • Does the brake pedal have the correct amount of free play?
Brakes	• The vehicle should not pull to one side when the brakes are applied. • The brakes should work effectively. • The brake pedal should not feel spongy. • The brake pedal should not get too close to the floor when the brakes are applied.
Head restraints	• Do the head restraints move smoothly and lock securely?
Indicators/buzzers	• Do the indicators and buzzers function properly?
Lights	• Do all the lights come on? • Are the headlights aimed correctly? (→P.444)

Items	Check points
Parking brake	• Does the parking brake operate normally? • When parked on a slope and the parking brake is on, is the vehicle securely stopped?
Seat belts	• Do the seat belts operate smoothly? • The seat belts should not be damaged.
Seats	• Do the seat controls operate properly?
Steering wheel	• Does the steering wheel rotate smoothly? • Does the steering wheel have the correct amount of free play? • There should not be any strange sounds coming from the steering wheel.

Vehicle exterior

Items	Check points
Doors/trunk	• Do the doors/trunk operate smoothly?
Engine hood	• Does the engine hood lock system work properly?
Fluid leaks	• There should not be any signs of fluid leakage after the vehicle has been parked.
Tires	• Is the tire inflation pressure correct? • The tires should not be damaged or excessively worn. • Have the tires been rotated according to the maintenance schedule? • The wheel bolts should not be loose.
Windshield wipers	• The wiper blades should not show any signs of cracking, splitting, wear, contamination or deformation. • The wiper blades should clear the windshield without streaking or skipping.

Emission inspection and maintenance (I/M) programs

Some states have vehicle emission inspection programs which include OBD (On Board Diagnostics) checks. The OBD system monitors the operation of the emission control system.

If the malfunction indicator lamp comes on

The OBD system determines that a problem exists somewhere in the emission control system. Your vehicle may not pass the I/M test and may need to be repaired. Contact your Lexus dealer to service the vehicle.

Your vehicle may not pass the I/M test in the following situations:

- When the battery is disconnected or discharged

Readiness codes that are set during ordinary driving are erased.
Also, depending on your driving habits, the readiness codes may not be completely set.

- When the fuel tank cap is loose

The malfunction indicator lamp comes on indicating a temporary malfunction and your vehicle may not pass the I/M test.

When the malfunction indicator lamp still remains on after several driving trips

The error code in the OBD system will not be cleared unless the vehicle is driven 40 or more times.

If your vehicle does not pass the I/M test

Contact your Lexus dealer to prepare the vehicle for re-testing.

Do-it-yourself service precautions

If you perform maintenance by yourself, be sure to follow the correct procedure as given in these sections.

Maintenance

Items	Parts and tools
Battery condition (→P.417)	• Grease • Conventional wrench (for terminal clamp bolts)
Brake fluid level (→P.415)	• FMVSS No.116 DOT 3 or SAE J1703 brake fluid FMVSS No.116 DOT 4 or SAE J1704 brake fluid • Rag or paper towel • Funnel (used only for adding brake fluid)
Engine/intercooler coolant level (→P.414)	• "Toyota Super Long Life Coolant" or a similar high quality ethylene glycol-based non-silicate, non-amine, non-nitrite and non-borate coolant with long-life hybrid organic acid technology For the U.S.A.: "Toyota Super Long Life Coolant" is pre-mixed with 50% coolant and 50% deionized water. For Canada: "Toyota Super Long Life Coolant" is pre-mixed with 55% coolant and 45% deionized water. • Funnel (used only for adding coolant)
Engine oil level (→P.412)	• "Toyota Genuine Motor Oil" or equivalent • Rag or paper towel • Funnel (used only for adding engine oil)
Fuses (→P.441)	• Fuse with same amperage rating as original
Headlight aim (→P.444)	• Phillips-head screwdriver

Items	Parts and tools
Radiator, condenser, intercooler radiator and intercooler sub radiator (→P.415)	—
Tire inflation pressure (→P.434)	• Tire pressure gauge • Compressed air source
Washer fluid (→P.416)	• Water or washer fluid containing antifreeze (for winter use) • Funnel (used only for adding water or washer fluid)

WARNING

The engine compartment contains many mechanisms and fluids that may move suddenly, become hot, or become electrically energized. To avoid death or serious injury, observe the following precautions.

■ When working on the engine compartment

- Keep hands, clothing and tools away from the moving fan and engine drive belt.
- Be careful not to touch the engine, radiator, exhaust manifold, etc. right after driving as they may be hot. Oil and other fluids may also be hot.
- Do not leave anything that may burn easily, such as paper and rags, in the engine compartment.
- Do not smoke, cause sparks or expose an open flame to fuel. Fuel fumes are flammable.

■ When working near the electric cooling fan or radiator grille

Be sure the engine switch is off.
With the engine switch in IGNITION ON mode, the electric cooling fan may automatically start to run if the air conditioning is on and/or the coolant temperature is high. (→P.415)

■ Safety glasses

Wear safety glasses to prevent flying or falling material, fluid spray, etc. from getting in your eyes.

NOTICE

■ If you remove the air cleaner filter

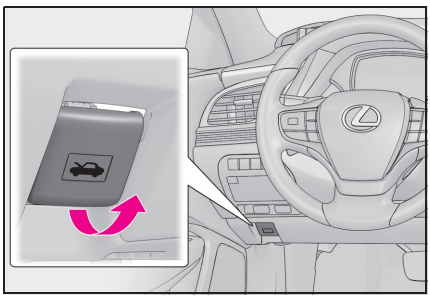
Driving with the air cleaner filter removed may cause excessive engine wear due to dirt in the air.

Hood

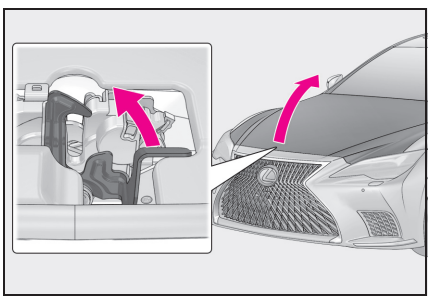
Opening the hood

1 Pull the hood lock release lever.

The hood will pop up slightly.



2 Pull up the auxiliary catch lever and lift the hood.



WARNING

■ Pre-driving check

Check that the hood is fully closed and locked.
If the hood is not locked properly, it may open while the vehicle is in motion and cause an accident, which may result in death or serious injury.

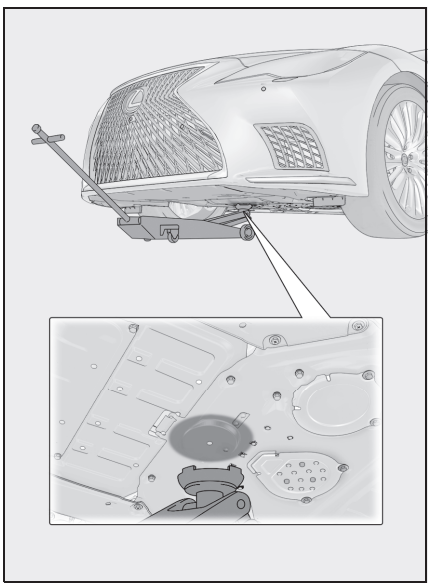
Positioning a floor jack

When using a floor jack, follow the instructions in the manual provided with the jack and perform the operation safely.
When raising your vehicle with a floor jack, position the jack correctly. Improper placement may damage your vehicle or cause injury.

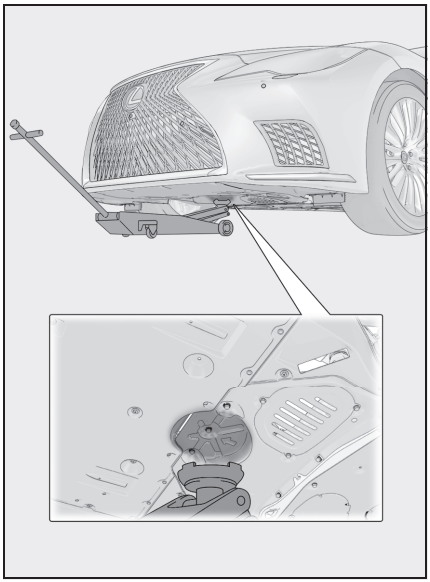
Location of the jack point

■ Front

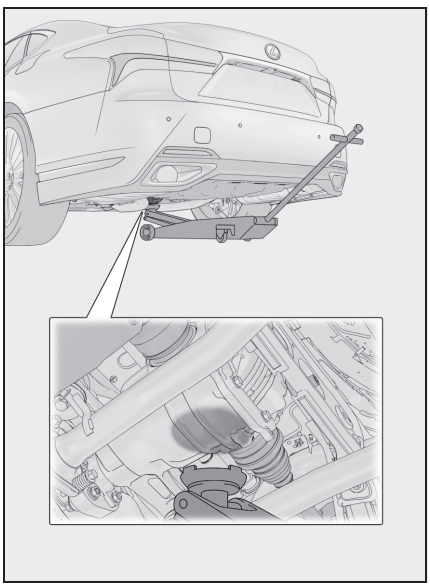
▶ 2WD models



▶ AWD models

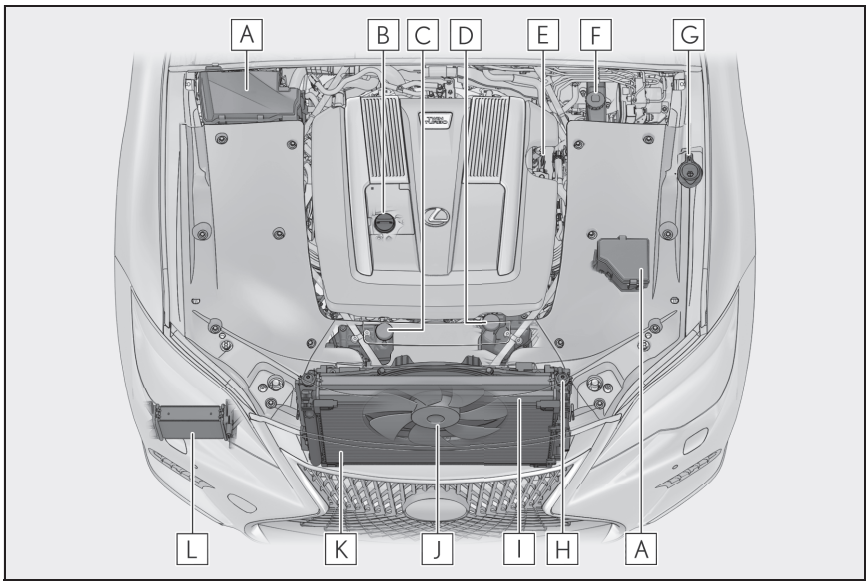


■ Rear



Engine compartment

Components



A Fuse boxes (→P.441)

B Engine oil filler cap (→P.413)

C Engine coolant reservoir (→P.414)

D Intercooler coolant reservoir (→P.414)

E Engine oil level dipstick (→P.412)

F Brake fluid reservoir (→P.415)

G Washer fluid tank (→P.416)

H Radiator (→P.415)

I Intercooler radiator (→P.415)

J Electric cooling fan

K Condenser (→P.415)

L Intercooler sub radiator (→P.415)

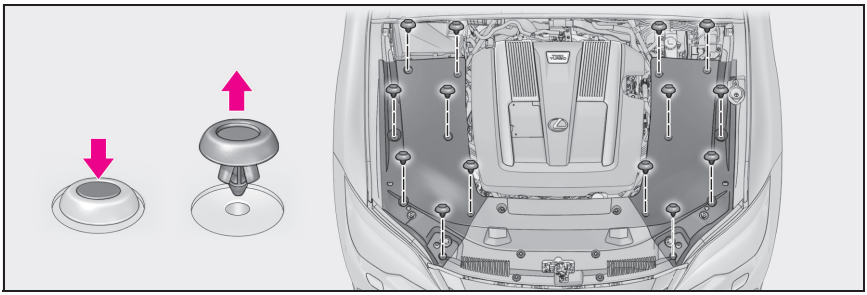
For AWD models:
The engine oil level dipstick is located on the opposite side of the engine.

■ **Battery**
→P.417

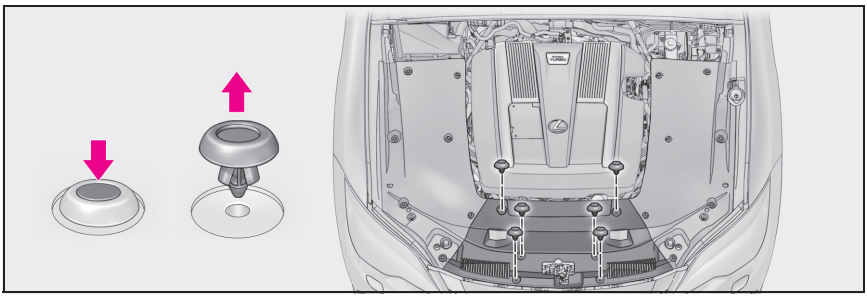
Engine compartment cover

■ Removing the engine compartment cover

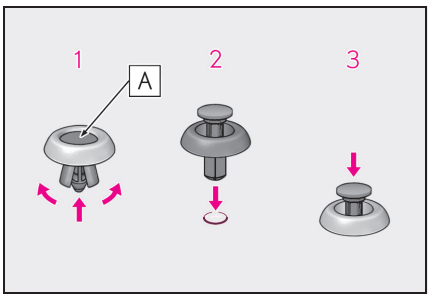
▶ Outside



▶ Front



■ Installing the clips



1 Push up center portion A
2 Insert
3 Press

NOTICE

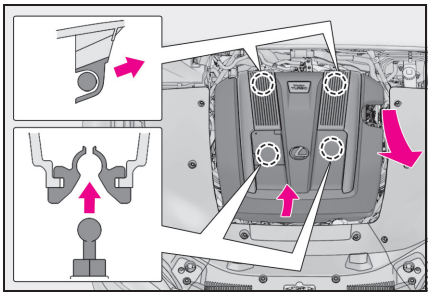
■ Checking the engine compartment cover after installation

Make sure that the cover is securely installed in its original position.

Engine cover

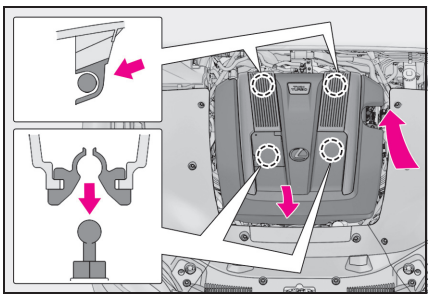
■ Removing the engine cover

Lift the front of the engine cover straight up and then pull it forward.



■ Installing the engine cover

Engage the claws of the engine cover to install it.



NOTICE

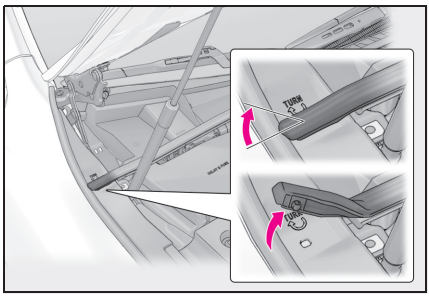
■ Checking the engine cover after installation

Make sure that the cover is securely installed in its original position.

Service cover

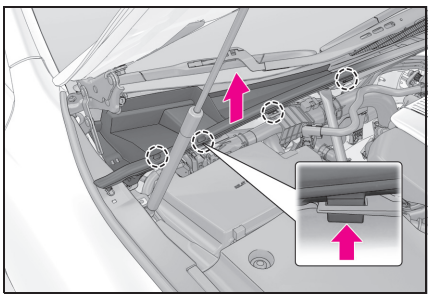
■ Removing the service cover

1 Pull up the passenger side end of the rubber strip to disengage it from the vehicle body.



2 Remove the service cover.

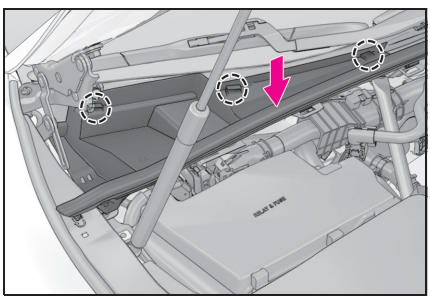
Push the tabs and lift away the service cover.



■ Installing the service cover

1 Install the service cover.

Make sure to engage the claws on the windshield side of the service cover when installing the service cover.



2 Engage the rubber strip to the vehicle body.

NOTICE

■ Checking the service cover after installation

Make sure that the cover is securely installed in its original position.

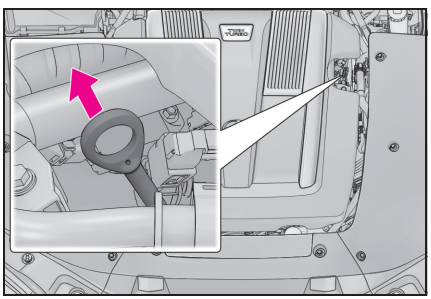
Checking the engine oil

With the engine at operating temperature and turned off, check the oil level on the dipstick.

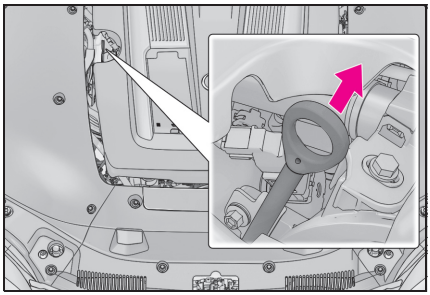
1 Park the vehicle on level ground. After warming up the engine and turning it off, wait about 5 minutes for the oil to drain back into the bottom of the engine.

2 Holding a rag under the end, pull the dipstick out.

▶ 2WD models



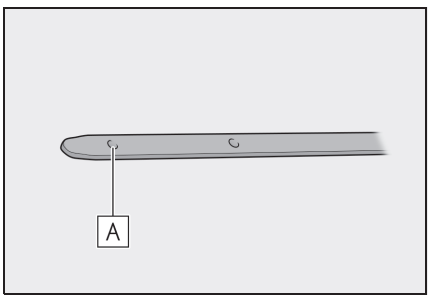
▶ AWD models



3 Wipe the dipstick clean.

4 Reinsert the dipstick fully.

5 Holding a rag under the end, pull the dipstick out and check whether the oil level is above low level mark.



A Low level mark

The shape of the dipstick may differ depending on the type of vehicle or engine.

6 Wipe the dipstick and reinsert it fully.

■ Engine oil consumption

A certain amount of engine oil will be consumed while driving. In the following situations, oil consumption may increase, and engine oil may need to be refilled in between oil maintenance intervals.

- When the engine is new, for example directly after purchasing the vehicle or after replacing the engine
- If low quality oil or oil of an inappropriate viscosity is used

- When driving at high engine speeds or with a heavy load or when driving while accelerating or decelerating frequently
- When leaving the engine idling for a long time, or when driving frequently through heavy traffic

■ Engine oil level rise

If the vehicle is repeatedly driven without the engine warmed up, moisture caused by dew condensation inside the engine or fuel which did not burn mixes into the engine oil, resulting in a rise in engine oil level. However, this is not a malfunction.

For example, the engine become difficult to be warmed up in the following situations.

- When driving a short distance
- When driving at a low speed
- When the outside temperature is low

When checking the engine oil, make sure that the engine is warmed up. If the engine oil level exceeds the refill upper limit mark, contact your Lexus dealer.

■ Checking the oil type and preparing the item needed

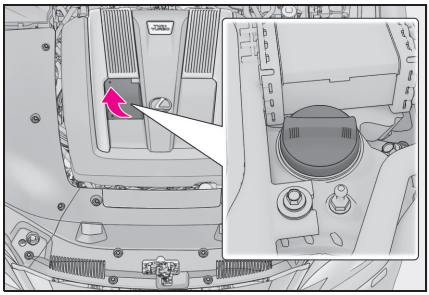
Make sure to check the oil type and prepare the items needed before adding oil.

- Engine oil selection
  →P.492
- Oil quantity (Low level mark → Refill upper limit mark)
  1.6 qt. (1.5 L, 1.3 Imp. qt.)
- Item
  Clean funnel

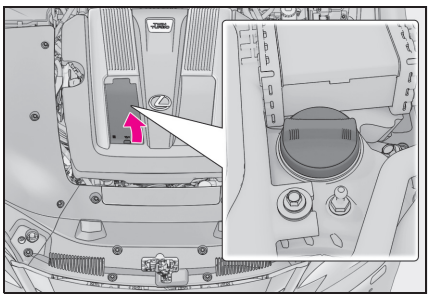
■ Adding engine oil

If the oil level is below or near the low level mark, add engine oil of the same type as that already in the engine.

▶ 2WD models



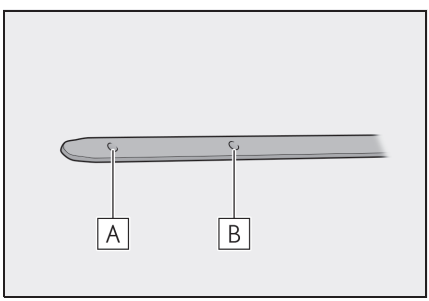
▶ AWD models



1 Remove the oil filler cap by turning it counterclockwise.

2 Add engine oil slowly, checking the dipstick.

Make sure that the oil level does not exceed the refill upper limit mark and is between the low level mark and refill upper limit mark.



A Low level mark

B Refill upper limit mark

The shape of the dipstick may differ depending on the type of vehicle or

engine.

3 Install the oil filler cap by turning it clockwise.

■ After changing the engine oil

The engine oil maintenance data should be reset. Perform the following procedures:

1 Select ⚙ on the center display.
2 Select "Vehicle customize".
3 Select "Utility".
4 Select "Oil maintenance".
5 Select "Reset".

A message will be displayed on the multi-information display when the reset procedure has been completed.

⚠ WARNING

■ Used engine oil

- Used engine oil contains potentially harmful contaminants which may cause skin disorders such as inflammation and skin cancer, so care should be taken to avoid prolonged and repeated contact. To remove used engine oil from your skin, wash thoroughly with soap and water.
- Dispose of used oil and filters only in a safe and acceptable manner. Do not dispose of used oil and filters in household trash, in sewers or onto the ground.
  Call your Lexus dealer, service station or auto parts store for information concerning recycling or disposal.
- Do not leave used engine oil within the reach of children.

⚠ NOTICE

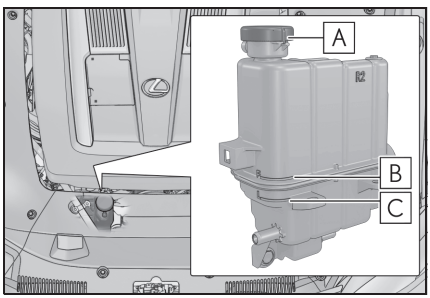
■ When replacing the engine oil

- Be careful not to spill engine oil on the vehicle components.
- Avoid overfilling, or the engine could be damaged.
- Check the oil level on the dipstick every time you refill the vehicle.
- Be sure the engine oil filler cap is properly tightened.

Checking the coolant

■ Engine coolant reservoir

The coolant level is satisfactory if it is between the "F" and "L" lines on the reservoir when the engine is cold.



A Reservoir cap

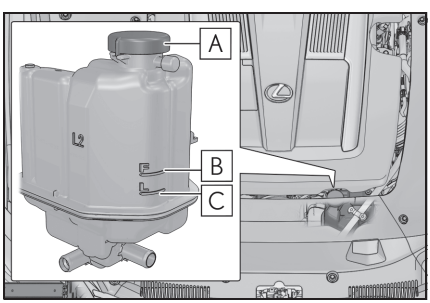
B "F" line

C "L" line

If the level is on or below the "L" line, add coolant up to the "F" line. (→P.484)

■ Intercooler coolant reservoir

The coolant level is satisfactory if it is between the "F" and "L" lines on the reservoir when the engine is cold.



A Reservoir cap

B "F" line

C "L" line

If the level is on or below the "L" line, add coolant up to the "F" line. (→P.484)

■ Coolant selection

Only use "Toyota Super Long Life Coolant" or a similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology.

U.S.A.:

"Toyota Super Long Life Coolant" is a mixture of 50% coolant and 50% deionized water. (Minimum temperature: -31°F [-35°C])

Canada:

"Toyota Super Long Life Coolant" is a mixture of 55% coolant and 45% deionized water. (Minimum temperature: -44°F [-42°C])

For more details about coolant, contact your Lexus dealer.

■ If the coolant level drops within a short time of replenishing

Visually check the radiator, hoses, engine coolant reservoir caps, drain cock and water pump.
If you cannot find a leak, have your Lexus dealer test the cap and check for leaks in the cooling system.

WARNING

■ When the engine is hot

Do not remove the engine coolant reservoir cap, the intercooler coolant reservoir cap and the coolant inlet cap. (→P.486)

The cooling system may be under pressure and may spray hot coolant if the cap is removed, causing serious injuries, such as burns.

NOTICE

■ When adding coolant

Coolant is neither plain water nor straight antifreeze. The correct mixture of water and antifreeze must be used to provide proper lubrication, corrosion protection and cooling. Be sure to read the antifreeze or coolant label.

■ If you spill coolant

Be sure to wash it off with water to prevent it from damaging parts or paint.

Checking the radiator, condenser, intercooler radiator (if equipped) and intercooler sub radiator (if equipped)

Check the radiator, condenser, intercooler radiator and intercooler sub radiator and clear away any foreign objects. If either of the above parts is extremely dirty or you are not sure of their condition, have your vehicle inspected by your Lexus dealer.

WARNING

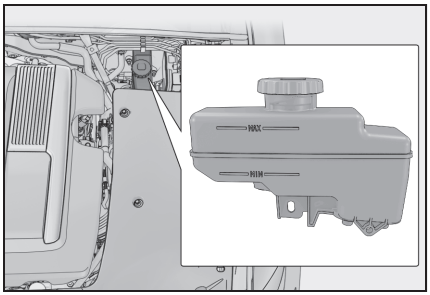
■ When the engine is hot

Do not touch the radiator, condenser, intercooler radiator or intercooler sub radiator as they may be hot and cause serious injuries, such as burns.

Checking and adding the brake fluid

■ Checking fluid level

The brake fluid level should be between the "MAX" and "MIN" lines on the tank.



Adding fluid

Make sure to check the fluid type and prepare the necessary item.

- Fluid type

FMVSS No.116 DOT 3 or SAE J1703 brake fluid

FMVSS No.116 DOT 4 or SAE J1704 brake fluid

- Item

Clean funnel

Brake fluid can absorb moisture from the air

Excess moisture in the brake fluid can cause a dangerous loss of braking efficiency. Use only newly opened brake fluid.

WARNING

When filling the reservoir

Take care as brake fluid can harm your hands and eyes and damage painted surfaces.
If fluid gets on your hands or in your eyes, flush the affected area with clean water immediately.

If you still experience discomfort, see a doctor.

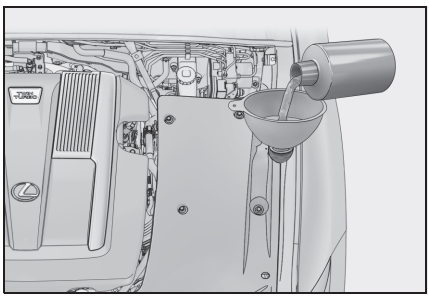
NOTICE

If the fluid level is low or high

It is normal for the brake fluid level to go down slightly as the brake pads wear out or when the fluid level in the accumulator is high.
If the reservoir needs frequent refilling, there may be a serious problem.

Adding the washer fluid

If any washer does not work or the warning message appears on the multi-information display, the washer tank may be empty. Add washer fluid.



WARNING

When adding washer fluid

Do not add washer fluid when the engine is hot or running as washer fluid contains alcohol and may catch fire if spilled on the engine, etc.

NOTICE

Do not use any fluid other than washer fluid

Do not use soapy water or engine anti-freeze instead of washer fluid.
Doing so may cause streaking on the vehicle's painted surfaces, as well as damaging the pump leading to problems of the washer fluid not spraying.

NOTICE

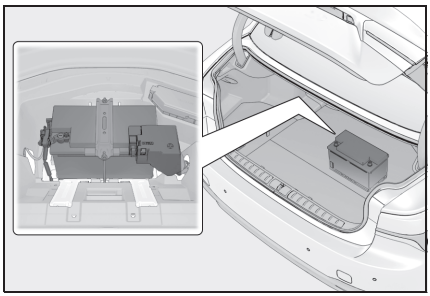
■ Diluting washer fluid

Dilute washer fluid with water as necessary.
Refer to the freezing temperatures listed on the label of the washer fluid bottle.

Battery

Location

The battery is located in the trunk under the luggage mat.



Removing the luggage mat: →P.368

■ Before recharging

When recharging, the battery produces hydrogen gas which is flammable and explosive. Therefore, observe the following precautions before recharging:

- If recharging with the battery installed on the vehicle, be sure to disconnect the ground cable.
- Make sure the charger is off when connecting and disconnecting the charger cables to the battery.

■ After recharging/reconnecting the battery

- Unlocking the doors using the smart access system with push-button start may not be possible immediately after reconnecting the battery. If this happens, use the wireless remote control or the mechanical key to lock/unlock the doors.
- Start the engine with the engine switch in ACCESSORY mode. The engine may not start with the engine switch turned off. However, the engine will operate normally from the second attempt.
- The engine switch mode is recorded by the vehicle. If the battery is reconnected, the vehicle will return the engine switch mode to the status it was in before the

battery was disconnected. Make sure to turn off the engine switch before disconnecting the battery. Take extra care when connecting the battery if the engine switch mode prior to discharge is unknown.

If the system will not start even after multiple attempts, contact your Lexus dealer.

WARNING

■ Chemicals in the battery

The battery contains poisonous and corrosive sulfuric acid and may produce hydrogen gas which is flammable and explosive. To reduce the risk of death or serious injury, take the following precautions while working on or near the battery:

- Do not cause sparks by touching the battery terminals with tools.
- Do not smoke or light a match near the battery.
- Avoid contact with eyes, skin and clothes.
- Never inhale or swallow electrolyte.
- Wear protective safety glasses when working near the battery.
- Keep children away from the battery.

■ Where to safely charge the battery

Always charge the battery in an open area. Do not charge the battery in a garage or closed room where there is insufficient ventilation.

■ Emergency measures regarding electrolyte

- If electrolyte gets in your eyes
  Flush your eyes with clean water for at least 15 minutes and get immediate medical attention. If possible, continue to apply water with a sponge or cloth while traveling to the nearest medical facility.
- If electrolyte gets on your skin
  Wash the affected area thoroughly. If you feel pain or burning, get medical attention immediately.
- If electrolyte gets on your clothes
  It can soak through clothing on to your skin. Immediately take off the clothing and follow the procedure above if necessary.
- If you accidentally swallow electrolyte
  Drink a large quantity of water or milk. Get emergency medical attention immediately.

■ When replacing the battery

Use a battery designed for this vehicle. Failure to do so may cause gas (hydrogen) to enter the passenger compartment, causing a fire or explosion.

For replacement of the battery, contact your Lexus dealer.

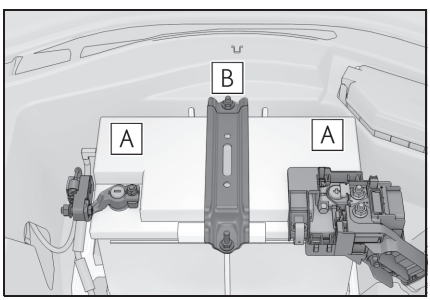
NOTICE

■ When recharging the battery

Never recharge the battery while the engine is running. Also, be sure all accessories are turned off.

Exterior

Make sure that the battery terminals are not corroded and that there are no loose connections, cracks, or loose clamps.

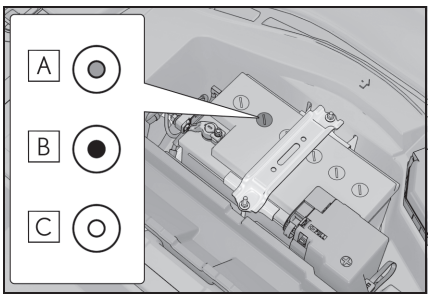


A Terminals

B Hold-down clamp

Checking the battery condition

Check the battery condition by indicator color.



A Blue: Good condition

B Red: Charging is necessary. Have the vehicle inspected by your Lexus dealer.

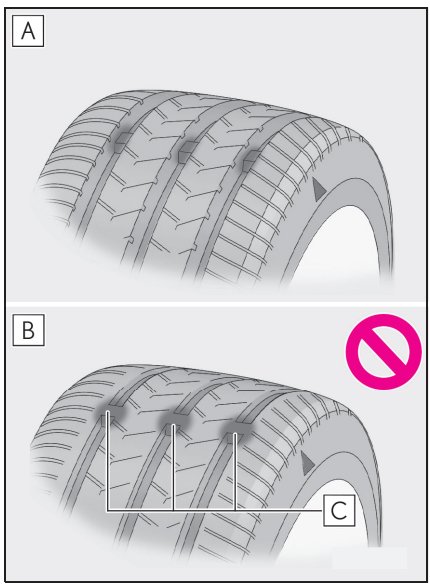
C Clear: Replacement is necessary. Have the battery checked by your Lexus dealer.

Tires

Replace or rotate tires in accordance with maintenance schedules and treadwear.

Checking tires

Check if the treadwear indicators are showing on the tires. Also check the tires for uneven wear, such as excessive wear on one side of the tread.



A New tread

B Worn tread

C Treadwear indicator

The location of treadwear indicators is shown by a "TWI" or " △ " mark, etc., molded into the sidewall of each tire. Replace the tires if the treadwear indicators are showing on a tire.

■ **When to replace your vehicle's tires**

Tires should be replaced if:

- The treadwear indicators are showing on a tire.
- You have tire damage such as cuts, splits, cracks deep enough to expose the fabric, and bulges indicating internal damage
- A tire goes flat repeatedly or cannot be properly repaired due to the size or location of a cut or other damage

If you are not sure, consult with your Lexus dealer.

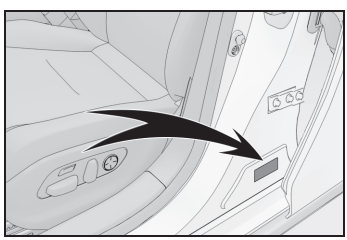
■ **Tire life**

Any tire over 6 years old must be checked by a qualified technician even if it has seldom or never been used or damage is not obvious.

■ **Maximum load of tire**

Check that the maximum load of the replacement tire is greater than 1/2 of the Gross Axle Weight Ratings (GAWR) of either the front axle or the rear axle, whichever is greater.

For the GAWR, see the Certification Label. For the maximum load of the tire, see the load limit at maximum cold tire inflation pressure mentioned on the sidewall of the tire. (→P.501)



■ **Tire types**

- Summer tires

Summer tires are high-speed performance tires best suited to highway driving under dry conditions. Since summer tires do not have the same traction performance as snow tires, summer tires are inadequate for driving on snow-covered or icy roads. For driving on snow-covered roads or icy roads, the use of snow tires is recommended. When installing snow tires, be sure to replace all four tires.

- All season tires

All season tires are designed to provide better traction in snow and to be adequate for driving in most winter conditions as well as for use year-round. All season tires, however, do not have adequate traction performance compared with snow tires in heavy or loose snow. Also, all season tires fall short in acceleration and handling performance compared with summer tires in highway driving.

- Snow tires

For driving on snow-covered roads or icy roads, we recommend using snow tires. If you need snow tires, select tires of the same size, construction and load capacity as the originally installed tires. Since your vehicle has radial tires as original equipment, make sure your snow tires also have radial construction. Do not install studded tires without first checking local regulations for possible restrictions. Snow tires should be installed on all wheels. (→P.335)

■ **If the tread on snow tires wears down below 0.16 in. (4 mm)**

The effectiveness of the tires as snow tires is lost.

WARNING

■ **When inspecting or replacing tires**

Observe the following precautions to prevent accidents.
Failure to do so may cause damage to parts of the drive train as well as dangerous handling characteristics, which may lead to an accident resulting in death or serious injury.

WARNING

- Do not mix tires of different makes, models or tread patterns.
  Also, do not mix tires of remarkably different treadwear.
- Do not use tire sizes other than those recommended by Lexus.
- Do not mix differently constructed tires (radial, bias-belted or bias-ply tires).
- Do not mix summer, all season and snow tires.
- Do not use tires that have been used on another vehicle.
  Do not use tires if you do not know how they were used previously.

NOTICE

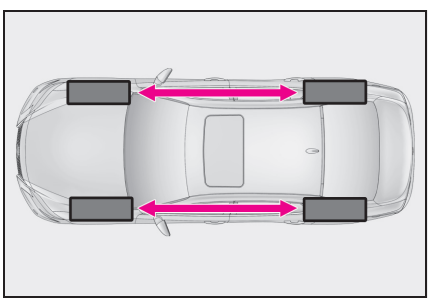
■ Driving on rough roads

Take particular care when driving on roads with loose surfaces or potholes. These conditions may cause losses in tire inflation pressure, reducing the cushioning ability of the tires. In addition, driving on rough roads may cause damage to the tires themselves, as well as the vehicle's wheels and body.

Tire rotation

▶ Vehicles with front and rear tires of the same size

Rotate the tires in the order shown.



To equalize tire wear and extend tire life, Lexus recommends that tire rotation is carried out at the same interval as tire inspection.

Make sure to perform wheel position registration procedure after rotating the tires. (→P.423)

▶ Vehicles with front and rear tires of differing sizes

Tires cannot be rotated.

Run-flat tires

A run-flat tire has a or mark on the side wall.

▶ For XXX/XXRXX size tires

When run-flat tires are installed, the vehicle can be driven for a maximum of 50 miles (80 km) at a speed below 50 mph (80 km/h) after any tire goes flat. (However, the vehicle speed may not increase to near 50 mph [80 km/h] depending on weather or driving conditions.)

Make sure to replace the flat tire before the vehicle has been driven for near 50 miles (80 km). Also, do not use a repaired tire.

▶ For XXX/XXRFXX size tires

When run-flat tires are installed, the vehicle can be driven for a maximum of 100 miles (160 km) at a speed below 50 mph (80 km/h) after any tire goes flat. (However, the vehicle speed may not increase to near 50 mph [80 km/h] depending on weather or driving conditions.)

Make sure to replace the flat tire before the vehicle has been driven for near 100 miles (160 km). Also, do not use a repaired tire.

■ Run-flat tires

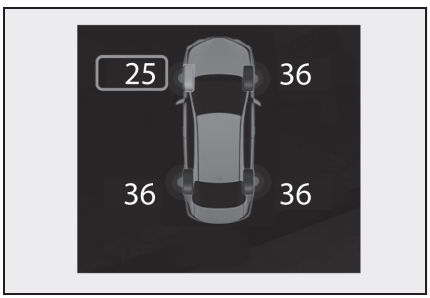
- The run-flat tires are for only this vehicle. Do not use the tires on other vehicles.
- Do not mix run-flat tires and normal tires.
- If non-genuine Lexus wheels are used, it may be impossible to sufficiently demonstrate the performance of run-flat tires.

Tire pressure warning system

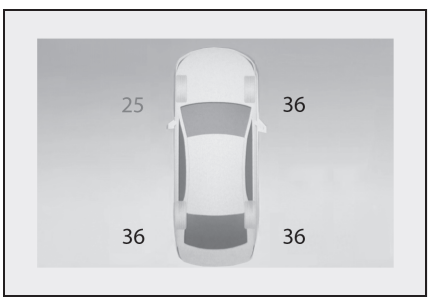
Your vehicle is equipped with a tire pressure warning system that uses tire pressure warning valves and transmitters to detect low tire inflation pressure before serious problems arise.

The tire pressure warning system of this vehicle adopts a 2-type warning system. (→P.461)

▶ Multi-information display



▶ Center display



- When "Adjust Pressure" is displayed on the multi-information display (Normal Warning)

A warning with the tire pressure warning light and warning buzzer when there is an unknown level of low tire pressure with the appearance of the tire due to natural air leakage as well as the pressure lowering due to changes in the pressure according to the outside temperature.

- When "Immediately Check tire when Safe" is displayed on the multi-information display (Emergency Warning)

A warning with the tire pressure warning light and warning buzzer when there is a known level of low tire pressure with the appearance of the tire due to pressure suddenly lowering.
However, the system may not be able to detect sudden tire ruptures (bursting, etc.).

- The tire pressure detected by the tire pressure warning system can be displayed on the center display. (→P.86)

■ Routine tire inflation pressure checks

The tire pressure warning system does not replace routine tire inflation pressure checks. Make sure to check tire inflation pressure as part of your routine of daily vehicle checks.

■ Tire inflation pressure

- It may take a few minutes to display the tire inflation pressure after the engine switch is turned to IGNITION ON mode. It may also take a few minutes to display the tire inflation pressure after inflation pressure has been adjusted.
- Tire inflation pressure changes with temperature. The displayed values may also be different from the values measured using a tire pressure gauge.

■ **Situations in which the tire pressure warning system may not operate properly**

● In the following cases, the tire pressure warning system may not operate properly.
- If non-genuine Lexus wheels are used.
- A tire has been replaced with a tire that is not an OE (Original Equipment) tire.
- A tire has been replaced with a tire that is not of the specified size.
- Tire chains, etc. are equipped.
- If a window tint that affects the radio wave signals is installed.
- If there is a lot of snow or ice on the vehicle, particularly around the wheels or wheel housings.
- If the tire inflation pressure is extremely higher than the specified level.
- If tires not equipped with tire pressure warning valves and transmitters are used.
- If the ID code on the tire pressure warning valves and transmitters is not registered in the tire pressure warning computer.

● Performance may be affected in the following situations.
- Near a TV tower, electric power plant, gas station, radio station, large display, airport or other facility that generates strong radio waves or electrical noise
- When carrying a portable radio, cellular phone, cordless phone or other wireless communication device

● If tire position information is not correctly displayed due to the radio wave conditions, the display may be corrected by changing the location of the vehicle as the radio wave conditions may change.

● When the vehicle is parked, the time taken for the warning to start or go off could be extended.

● When tire inflation pressure declines rapidly for example when a tire has burst, the warning may not operate.

Installing tire pressure warning valves and transmitters

When replacing tires or wheels, tire pressure warning valves and transmitters must also be installed.

When new tire pressure warning valves and transmitters are installed, new ID codes must be registered in the tire pressure warning computer. (→P.426)

■ **Replacing tires and wheels**

If the ID code of the tire pressure warning valve and transmitter is not registered, the tire pressure warning system will not work properly. In this case, after driving for about 20 minutes, the tire pressure warning light blinks for 1 minute and stays on to indicate a system malfunction.

NOTICE

■ **Repairing or replacing tires, wheels, tire pressure warning valves, transmitters and tire valve caps**

● When removing or fitting the wheels, tires or the tire pressure warning valves and transmitters, contact your Lexus dealer as the tire pressure warning valves and transmitters may be damaged if not handled correctly.

● Make sure to install the tire valve caps. If the tire valve caps are not installed, water could enter the tire pressure warning valves, corrode the valve, and cause sticking and air leaks.

● When replacing tire valve caps, do not use tire valve caps other than those specified. The cap may become stuck.

Registering the position of each wheel

■ When to register the position of each wheel

It is necessary to register the position of each wheel after performing a tire

rotation.

Wheel position registration can be performed by oneself. Wheel position registration is performed by driving forward with moderate left and right turns. However, depending on the driving conditions and driving environment, registration may take some time to complete.

■ **Registering the position of each wheel**

1 Park the vehicle in a safe place, turn the engine switch off and wait 15 minutes or more.

2 Start the engine.

The wheel position registration procedure cannot be performed while the vehicle is moving.

3 Select ⚙ on the center display.

4 Select "Vehicle customize".

5 Select "Tire pressure".

6 Select "Tire rotation".

7 Select "Continue".

A message indicating that wheel position registration is being performed will be displayed on the multi-information display. "---" will be displayed for the tire inflation pressure of each tire and wheel position registration will begin.

8 Drive straight (with occasional left and right turns) at approximately 25 mph (40 km/h) or more for approximately 10 to 30 minutes.

When wheel position registration is complete, a message indicating that registration has been completed and the inflation pressure of each tire will be displayed on the multi-information display.

Even if it is not possible to drive continuously at approximately 25 mph (40 km/h) or more, registration can be completed by driving for a long time. However, if registration does not complete after driving for 1 hour or more, park the vehicle in a safe place and leave it with the engine switch in IGNITION ON mode for approximately 15 minutes or more, and then perform the driving procedure again.

■ **When performing wheel position registration**

- Normally, wheel position registration can be completed within approximately 30 minutes.
- Wheel position registration is performed while driving at a vehicle speed of approximately 25 mph (40 km/h) or more.

■ **Wheel position registration procedure**

- If the engine switch is turned off while registering the wheel position, the next time the engine switch is turned to IGNITION ON mode, the wheel position registration will resume and it will not be necessary to restart the procedure.
- While the position of each wheel is being determined and the inflation pressures are not being displayed, if the inflation pressure of a tire drops, the tire pressure warning light will come on.

■ **If the wheel position cannot be registered easily**

- In the following situations, wheel position registration may take longer than usual to be completed or may not be possible.
  - Vehicle is not driven at approximately 25 mph (40 km/h) or more
  - Vehicle is driven on unpaved roads
- If wheel position registration does not complete after driving for 1 hour or more, park the vehicle in a safe place for approximately 15 minutes and then drive the vehicle again.
- If the vehicle is reversed during wheel position registration, all data collected until then will be cleared. Perform driving again.

Setting the tire pressure

When you need to setting the tire pressure

In the following situations, it will be necessary to perform the tire inflation pressure setting procedure of the tire pressure warning system.

- When the specified tire inflation pressure has changed, such as due to carried load, etc.
- When the tire inflation pressure is changed such as when the tire size is changed.

If the tire inflation pressure has been adjusted to the specified level, perform the tire inflation setting procedure by selecting specified inflation pressure on the center display. (→P.425)

When the tire inflation pressure is to be other than specified, such as when tires other than the specified size are used, etc., set the tire inflation pressure using the current pressure. Make sure to adjust the tire inflation pressure of each tire to the appropriate level before performing tire pressure setting. The tire pressure warning system operates based on this tire inflation pressure. (→P.425)

Setting by selecting a specified tire inflation pressure

1 Start the engine.

The tire inflation pressure cannot be set while the vehicle is moving.

2 Select ⚙ on the center display.

3 Select “Vehicle customize”.

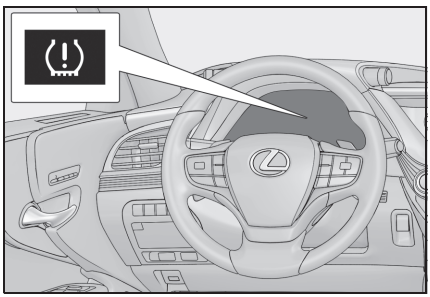
4 Select “Tire pressure”.

5 Select “Set indicated air pressure” and then select the desired front and rear tire pressures.

6 Select “OK”.

The tire pressure warning light will slowly blink 3 times.

After setting the tire inflation pressure, a message indicating that setting has been completed will be displayed on the multi-information display.



Setting using the current tire inflation pressure

1 Adjust the tire inflation pressure of each tire to the appropriate level.

Make sure to adjust the tire inflation pressure with the tires cold.

2 Start the engine.

The tire inflation pressure cannot be set while the vehicle is moving.

3 Select ⚙ on the center display.

4 Select “Vehicle customize”.

5 Select “Tire pressure”.

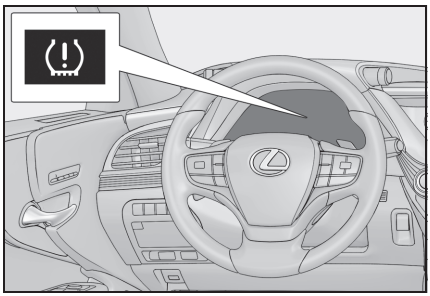
6 Select “Set current air pressure”.

7 Select “Continue”.

The tire pressure warning light will slowly blink 3 times and a message indicating that tire inflation pressure is being set will be displayed on the multi-information display.

After setting the tire inflation pressure, a message indicating that setting has been

completed will be displayed on the multi-information display.



■ **Warning performance of the tire pressure warning system (Setting using the current tire inflation pressure)**

- When performing the tire pressure setting using the current tire inflation pressure, the warning timing of the tire pressure warning system will vary according to the conditions under which tire pressure setting was performed. Therefore, a warning may be output even if the tire inflation pressure drops slightly or if the tire inflation pressure increases above that when the tire inflation pressure was set.
- Make sure to perform the tire pressure setting procedure after adjusting the tire inflation pressure. Also, make sure the tires are cold before performing the tire pressure setting procedure or adjusting the tire inflation pressure.

■ **Tire inflation pressure setting procedure (Setting using the current tire inflation pressure)**

- If the engine switch is turned off while setting the tire inflation pressure, the next time the engine switch is turned to IGNITION ON mode, the setting procedure will resume and it will not be necessary to restart the procedure.
- If the tire inflation pressure setting procedure is started unnecessarily, adjust the tire inflation pressure to the specified level with the tires cold and then perform setting by selecting a specified tire inflation pressure, or perform the tire inflation pressure setting procedure with the current tire inflation pressure.

■ **If the tire inflation pressure cannot be set easily**

- Normally, it takes approximately 3 minutes to complete the setting procedure to the current tire inflation pressure.
- If the tire pressure warning light does not blink 3 times when starting the tire inflation pressure setting procedure, the procedure may not have started. Perform the procedure again from the beginning.
- If tire inflation pressure setting procedure cannot be completed after performing the above procedure, contact your Lexus dealer.

WARNING

■ **When setting using the current tire inflation pressure**

Make sure to adjust the tire inflation pressure of each tire to the appropriate level before performing tire pressure setting. Otherwise, the tire pressure warning light may not illuminate even if the tire inflation pressure drops or may illuminate even though the tire inflation pressure is normal.

Registering ID codes

■ When to register ID codes

The tire pressure warning valve and transmitter is equipped with a unique ID code. When new tire pressure warning valves and transmitters are installed, new ID codes must be registered in the tire pressure warning computer.

■ How to registration ID code

Before performing ID code registration, make sure that no wheels with tire pressure warning valve and transmitters installed are near the vehicle.

1 Park the vehicle in a safe place, turn the engine switch off and wait 15 minutes or more.

2 Start the engine.

The ID code registration procedure cannot be performed while the vehicle is moving.

3 Select ⚙ on the center display.

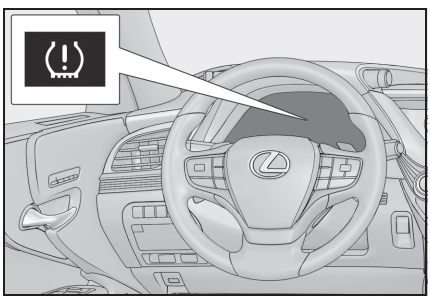
4 Select "Vehicle customize".

5 Select "Tire pressure".

6 Check if the desired wheel set ("Set 1" or "Set 2") is displayed.

ID codes will be registered to the displayed wheel set.
To change the wheel set to be registered, select the displayed set, and then select the wheel set you wish to register.

If ID codes have already been registered for that wheel set, the tire pressure warning light will slowly blink 3 times, and a message indicating that change is occurring will be displayed on the multi-information display.

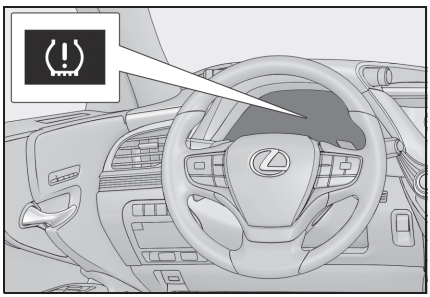


7 Select "New tire registration".

8 Select "Continue".

The tire pressure warning light will slowly blink 3 times and a message indicating that ID code registration is being performed will be displayed on the multi-information display. Wheel set changing will be canceled and registration will begin.

When registration is being performed, the tire pressure warning light will blink for approximately 1 minute then illuminate and "---" will be displayed for the inflation pressure of each tire on the multi-information display.



9 Drive straight (with occasional left and right turns) at approximately 25 mph (40 km/h) or more for approximately 10 to 30 minutes.

When registration is complete, the tire pressure warning light will turn off and a message indicating that registration has been completed will be displayed on the multi-information display.

Registration may take longer than normal to complete if the vehicle speed cannot be maintained at approximately 25 mph (40 km/h) or more. If registration cannot be completed after driving for 1 hour or more, perform the registration procedure again from the beginning.

10 If the tire inflation pressure of the wheel set installed differs from that of the previous set, it will be necessary to perform the tire inflation pressure setting procedure of the tire pressure warning system. (→P.425)

If the specified tire inflation pressure is the same, it will not be necessary to perform the tire inflation pressure setting procedure.

■ **When registering ID codes**

● Normally, wheel position registration can be completed within approximately 30 minutes.

- ID code registration is performed while driving at a vehicle speed of approximately 25 mph (40 km/h) or more.
- ID codes can be registered by yourself, but depending on the driving conditions and driving environment, registration may take some time to complete.
- When using a wheel set which all of the ID codes have already been registered, the wheel set can be changed in a short amount of time. (→P.428)

■ **If ID codes are not registered easily**

- In the following situations, ID code registration may take longer than usual to be completed or may not be possible.
  - When the vehicle has not been parked for approximately 15 minutes or more before being driven
  - Vehicle is not driven at approximately 25 mph (40 km/h) or more
  - Vehicle is driven on unpaved roads
  - Vehicle is driven near other vehicles and system cannot recognize tire pressure warning valve and transmitters of your vehicle over those of other vehicles
  - Wheel with tire pressure warning valve and transmitter installed is inside or near the vehicle
- If the vehicle is reversed during registration, all data collected until then will be cleared. Perform driving again.
- If registration does not complete after driving for 1 hour or more, perform the ID code registration procedure again from the beginning.
- If the tire pressure warning light does not blink 3 times when starting ID code registration procedure, the procedure may not have started. Perform the procedure again from the beginning.
- If the ID codes cannot be registered even when performing the above procedure, contact your Lexus dealer.

Canceling ID code registration

To cancel ID code registration after it has been started, select "New tire registration" again on the center display.

If ID code registration has been canceled, the tire pressure warning light will turn off.

If the warning light does not turn off, ID code registration may not have been cancelled correctly. To cancel registration, select "New tire registration" again on the center display.

Selecting wheel set

Your vehicle is equipped with a tire pressure warning system with a function to register two sets of ID codes. This allows for registration of a second wheel set, for example a winter set.

- The wheel set can be changed only if a second wheel set has been registered to the system. If a second wheel set has not been registered, "Set 2 (Unregistered)" will be displayed and it will not be possible to change to the selected wheel set.

ID codes can be registered by yourself. (→P.426)

- Only a change between both registered wheel set is possible, mixing between these wheel sets is not supported.
- While registering ID codes, it may not be possible to change between wheel sets normally. Cancel registration before changing between wheel sets.

■ **Changing ID codes between different wheel sets**

1. Install the desired wheel set.
2. Select ⚙ on the center display.
3. Select "Vehicle customize".

4 Select “Tire pressure”.

5 Select the wheel set (“Set 1” or “Set 2”) displayed for the set selection setting.

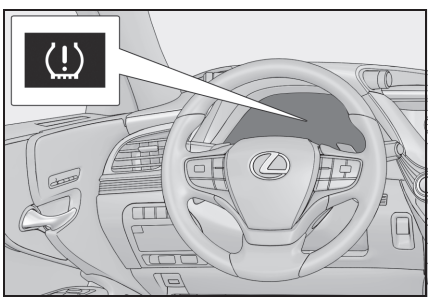
6 Select the wheel set you wish to register, and then select “OK”.

The tire pressure warning light will slowly blink 3 times, a message indicating that change is occurring will be displayed, and the wheel set change will begin.

Wheel set change will begin and the tire pressure warning light will blink for 1 minute and then illuminate. Also, while the change is being performed, “---” will be displayed for the tire inflation pressure of each tire on the multi-information display.

After approximately 2 minutes, the wheel set change will complete, the tire pressure warning light will turn off, and a completion message will be displayed on the multi-information display.

If changing does not complete after approximately 4 minutes, a message indicating that the change could not be completed will be displayed.
Check which wheel set is installed and perform the change procedure again from the beginning.



7 If the specified tire inflation pressure of the wheel set installed differs from that of the previous set, it will be necessary to perform the tire inflation pressure setting procedure of the tire pressure warning system. (→P.425)

If the specified tire inflation pressure is the same, it will not be necessary to perform the tire inflation pressure setting procedure.

8 Register the position of each wheel. (→P.423)

Replacing the tire

When replacing the tires yourself, prepare the necessary tools and a jack. This vehicle uses wheel bolts. When using wheels that were installed when the vehicle was shipped from the factory, specialized Lexus genuine wheel bolts must be used.

If necessary tire replacement seems difficult to perform, contact your Lexus dealer.

Before jacking up the vehicle

- Stop the vehicle in a safe place on a hard, flat surface.
- Set the parking brake.
- Shift the shift position to P.
- Disabling the height control. (if equipped) (→P.329)
- Stop the engine.

Jack and tools

As your vehicle is equipped with run-flat tires, the following tools for replacing a tire are not included with your vehicle. They can be purchased at your Lexus dealer.

- Wheel bolt socket
- Jack
- Jack handle
- Guide pin
- Wheel bolt wrench

WARNING

Using the tire jack

Observe the following precautions. Improper use of the tire jack may cause the vehicle to suddenly fall off the jack, leading to death or serious injury.

- Do not use the tire jack for any purpose other than replacing tires or installing and removing tire chains.
- Do not use other tire jacks for replacing tires on this vehicle.
- Put the jack properly in its jack point.
- Do not put any part of your body under the vehicle while it is supported by the jack.
- Do not start the engine or drive the vehicle while the vehicle is supported by the jack.
- Do not raise the vehicle while someone is inside.
- When raising the vehicle, do not put an object on or under the jack.
- Do not raise the vehicle to a height greater than that required to replace the tire.
- Use a jack stand if it is necessary to get under the vehicle.
- Make sure to disable all functions of the vehicle height control of the electronically modulated air suspension and then stopping the engine. (→P.329)
- When lowering the vehicle, make sure that there is no-one near the vehicle. If there are people nearby, warn them vocally before lowering.

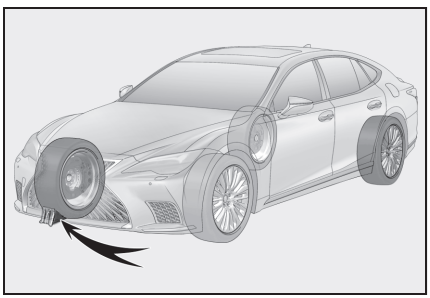
WARNING

■ Replacing a flat tire for vehicles with power trunk opener and closer (if equipped)

In cases such as when replacing tires, make sure to turn off the trunk opener main switch (→P.107). Failure to do so may cause the trunk lid to operate unintentionally if the power trunk opener and closer switch is accidentally touched, resulting in hands and fingers being caught and injured.

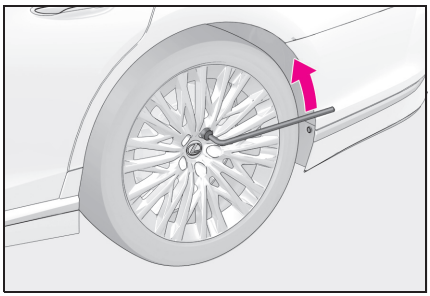
Removing a tire

1 Chock the tires.



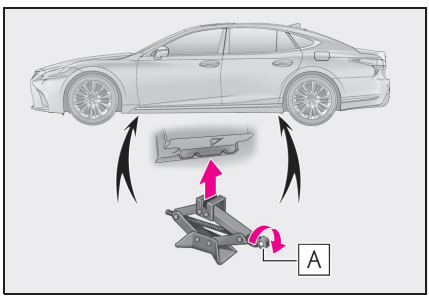
Tire	Wheel chock positions
Front left-hand side	Behind the rear right-hand side tire
Front right-hand side	Behind the rear left-hand side tire
Rear left-hand side	In front of the front right-hand side tire
Rear right-hand side	In front of the front left-hand side tire

2 Using a wheel bolt wrench, slightly loosen the wheel bolts (approximately one turn).

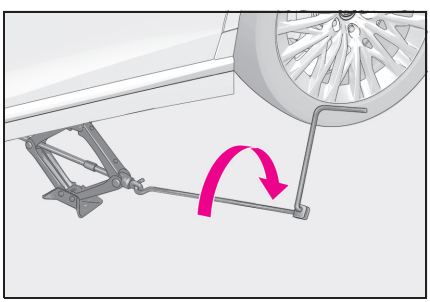


3 Turn the tire jack portion [A] by hand until the notch of the jack is in contact with the jack point.

The jack point guides are located under the rocker panel. They indicate the jack point positions.

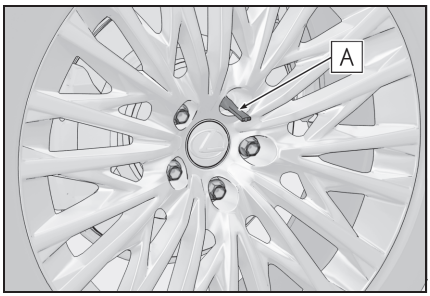


4 Raise the vehicle until the tire is slightly raised off the ground.



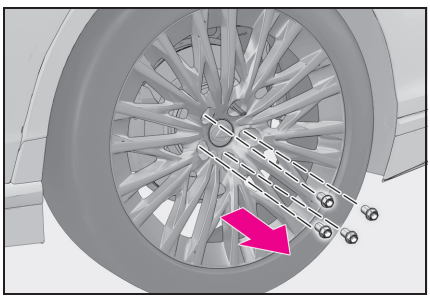
5 Remove the uppermost wheel bolt and install the guide pin [A] by hand.

Turn the guide pin clockwise to tighten it until it stops.



6 Remove the remaining wheel bolts and the tire.

When resting the tire on the ground, place the tire so that the wheel design faces up to avoid scratching the wheel surface.



WARNING

■ Replacing a tire

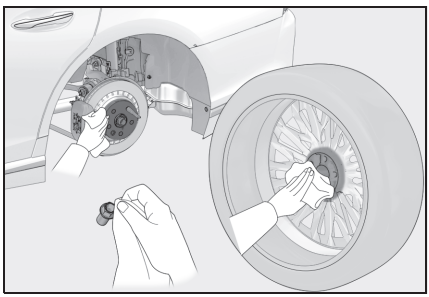
Do not touch the disc wheels or the area around the brakes immediately after the vehicle has been driven.

After the vehicle has been driven the disc wheels and the area around the brakes will be extremely hot. Touching these areas with hands, feet or other body parts while changing a tire, etc. may result in burns.

Installing the tire

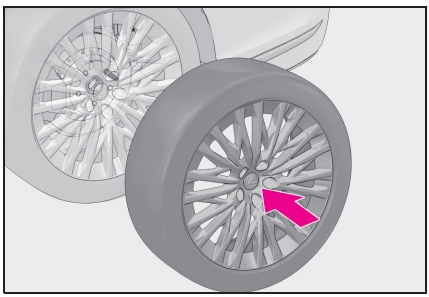
1 Remove any dirt or foreign matter from the wheel contact surfaces and wheel bolts.

If foreign matter is not removed, the wheel bolts may loosen while the vehicle is in motion, and the wheel may come off.



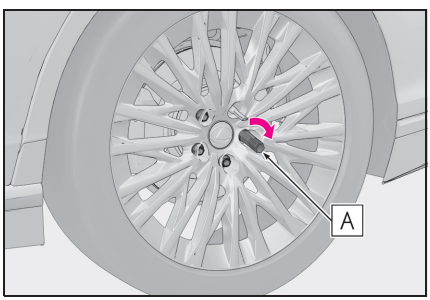
2 Align a wheel bolt hole on the tire with the guide pin and install the tire.

Align the center hole of the wheel with the center of the hub and securely set the tire so that the wheel and hub contact surfaces are touching.

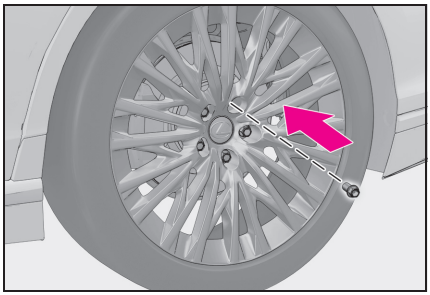


3 Loosely tighten each wheel bolt by hand or using a wheel bolt socket A.

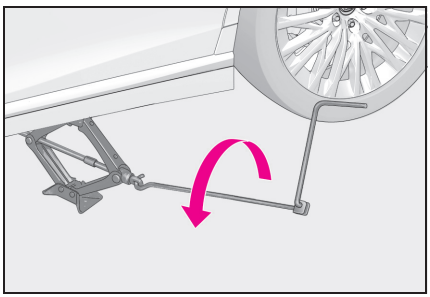
Do not use the wheel bolt socket for anything other than loosely tightening the wheel bolts by hand.



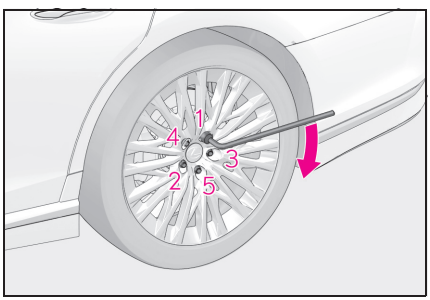
4 Remove the guide pin and loosely tighten the wheel bolt as in step 3.



5 Lower the vehicle.



6 Securely tighten the wheel bolts two or three times in the order shown in the illustration using a wheel bolt wrench.
Tightening torque:
103 ft•lbf (140 N•m, 14.3 kgf•m)



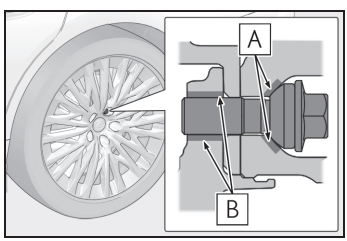
WARNING

■ When installing the tire

Failure to follow these precautions could cause the wheel bolts to loosen and the tire to fall off, resulting in death or serious injury.

- The contact surfaces of the wheel bolt and wheel are designed specifically to fit together. When using wheels that were installed when the vehicle was shipped from the factory, use specialized Lexus genuine wheel bolts. Do not use wheel bolts designed for other models, model years or types even if they are Lexus genuine parts. If the vehicle does not have wheels that were installed to the vehicle when it was shipped from the factory, the factory-installed wheel bolts may not be appropriate for the wheel. Contact either the retailer where the wheels were purchased or the manufacturer of the wheels for proper installation advice.

- Never apply oil or grease to the wheel bolts or their contact surface on the wheel **A**.
Doing so may cause the wheel bolts to be tightened excessively, leading to damage to the wheel bolts, the threaded portion the wheel bolts install to **B**, or the wheel.
Remove any oil or grease that has adhered when installing the wheel bolts.



WARNING

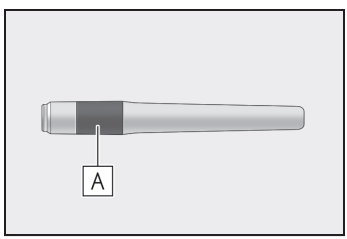
- After replacing a tire, check the tightening torque as soon as possible. If you cannot confirm the tightening torque yourself, have the vehicle inspected at your Lexus dealer.
- Do not attach a heavily damaged wheel ornament, as it may fly off the wheel while the vehicle is moving.
- If a wheel bolt hole in a wheel or the threads of a wheel bolt or the wheel hub are deformed, cracked, rusty or otherwise damaged, have the vehicle inspected by your Lexus dealer.

■ When tightening the wheel bolts

Do not tighten the wheel bolts excessively. Doing so may cause the wheel bolts, the threads of the wheel hub, or the wheel to be damaged.

■ Guide pin

When removing or installing a tire, make sure to use the guide pin.
Also, the guide pin is made of resin. It may be damaged if the wheel is placed anywhere other than A or if a large amount of force is applied to the guide pin.



NOTICE

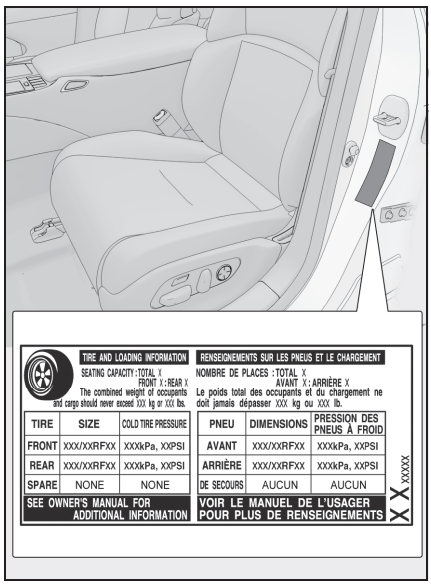
■ Repairing or replacing tires, wheels, tire pressure warning valves, transmitters and tire valve caps

→P.423

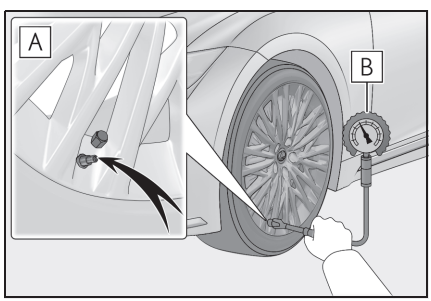
Tire inflation pressure

Checking the specified tire inflation pressure

The recommended cold tire inflation pressure and tire size are displayed on the tire and loading information label. (→P.496)



Inspection and adjustment procedure



A Tire valve

B Tire pressure gauge

1 Remove the tire valve cap.

2 Press the tip of the tire pressure gauge onto the tire valve.

3 Read the pressure using the gauge gradations.

4 If the tire inflation pressure is not at the recommended level, adjust the pressure.
If you add too much air, press the center of the valve to deflate.

5 After completing the tire inflation pressure measurement and adjustment, apply soapy water to the valve and check for leakage.

6 Put the tire valve cap back on.

Tire inflation pressure check interval

You should check tire inflation pressure every two weeks, or at least once a month. Do not forget to check the spare.

Effects of incorrect tire inflation pressure

Driving with incorrect tire inflation pressure may result in the following:

- Reduced fuel economy
- Reduced driving comfort and poor handling
- Reduced tire life due to wear
- Reduced safety
- Damage to the drive train

If a tire needs frequent inflating, have it checked by your Lexus dealer.

Instructions for checking tire inflation pressure

When checking tire inflation pressure, observe the following:

- Check only when the tires are cold.
If your vehicle has been parked for at least 3 hours or has not been driven for more than 1 mile or 1.5 km, you will get an accurate cold tire inflation pressure reading.
- Always use a tire pressure gauge.
It is difficult to judge if a tire is properly inflated based only on its appearance.
- It is normal for the tire inflation pressure to be higher after driving as heat is generated in the tire. Do not reduce tire inflation pressure after driving.
- Never exceed the vehicle capacity weight.
Passengers and luggage weight should be placed so that the vehicle is balanced.

WARNING

Proper inflation is critical to save tire performance

Keep your tires properly inflated.
If the tires are not properly inflated, the following conditions may occur which could lead to an accident resulting in death or serious injury:

- Excessive wear
- Uneven wear
- Poor handling
- Possibility of blowouts resulting from overheated tires
- Air leaking from between tire and wheel
- Wheel deformation and/or tire damage
- Greater possibility of tire damage while driving (due to road hazards, expansion joints, sharp edges in the road, etc.)

NOTICE

■ When inspecting and adjusting tire inflation pressure

Be sure to put the tire valve caps back on. If a valve cap is not installed, dirt or moisture may get into the valve and cause an air leak, resulting in decreased tire inflation pressure.

Wheels

If a wheel is bent, cracked or heavily corroded, it should be replaced. Otherwise, the tire may separate from the wheel or cause a loss of handling control.

Wheel selection

When replacing wheels, care should be taken to ensure that they are equivalent to those removed in load capacity, diameter, rim width and inset*.

Replacement wheels are available at your Lexus dealer.

*: Conventionally referred to as offset.

Lexus does not recommend using the following:

- Wheels of different sizes or types
- Used wheels
- Bent wheels that have been straightened

■ When replacing wheels

The wheels of your vehicle are equipped with tire pressure warning valves and transmitters that allow the tire pressure warning system to provide advance warning in the event of a loss in tire inflation pressure. Whenever wheels are replaced, the tire pressure warning valves and transmitters must be installed. (→P.423)

WARNING

■ When replacing wheels

- Do not use wheels that are a different size from those recommended in the Owner's Manual, as this may result in a loss of handling control.
- Never use an inner tube in a leaking wheel which is designed for a tubeless tire.
  Doing so may result in an accident, causing death or serious injury.

■ Use of defective wheels prohibited

Do not use cracked or deformed wheels. Doing so could cause the tire to leak air during driving, possibly causing an accident.

NOTICE

■ Replacing tire pressure warning valves and transmitters

- Because tire repair or replacement may affect the tire pressure warning valves and transmitters, make sure to have tires serviced by your Lexus dealer or other qualified service shop. In addition, make sure to purchase your tire pressure warning valves and transmitters at your Lexus dealer.
- Ensure that only genuine Lexus wheels are used on your vehicle.
  Tire pressure warning valves and transmitters may not work properly with non-genuine wheels.

Aluminum wheel precautions

- Use only Lexus wheel bolts and wheel bolt wrenches designed for use with your aluminum wheels.
- When rotating, repairing or changing your tires, check that the wheel bolts are still tight after driving 621 miles (1000 km).
- Be careful not to damage the aluminum wheels when using tire chains.
- Use only Lexus genuine balance weights or equivalent and a plastic or rubber hammer when balancing your wheels.

Air conditioning filter

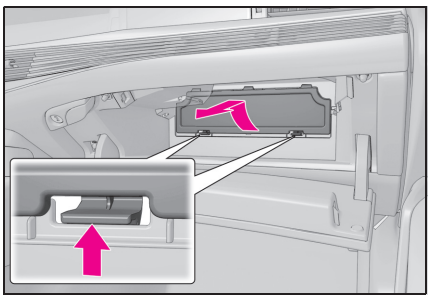
The air conditioning filter must be changed regularly to maintain air conditioning efficiency.

Removing the air conditioning filter

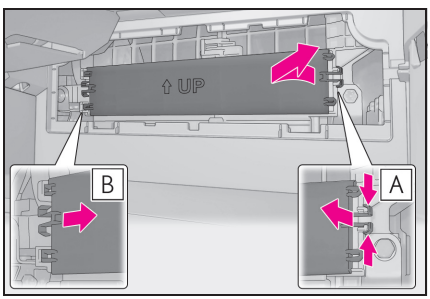
1 Turn the engine switch off.

2 Open the glove box. Remove the partition. (→P.365)

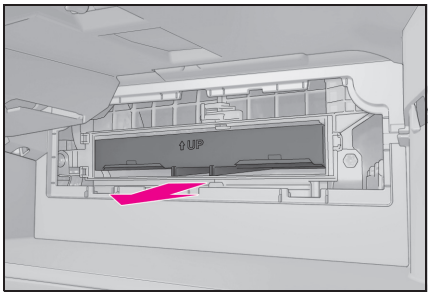
3 Remove the panel.



4 Unlock the filter cover (A), pull the filter cover out of the claws (B), and remove the filter cover.

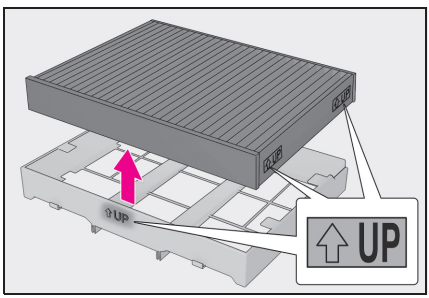


5 Remove the filter case.



6 Remove the air conditioning filter from the filter case and replace it with a new one.

The " UP" marks shown on the filter and the filter case should be pointing up.



■ Checking interval

Inspect and replace the air conditioning filter according to the maintenance schedule. In dusty areas or areas with heavy traffic flow, early replacement may be required. (For scheduled maintenance information, please refer to the "Owner's Manual Supplement" or "Scheduled Maintenance".)

■ If air flow from the vents decreases dramatically

The filter may be clogged. Check the filter and replace if necessary.

■ Air conditioning filter with deodorizing function

When fragrances are placed in your vehicle, the deodorizing effect may become significantly weakened in a short period. When an air conditioning odor comes out continuously, replace the air conditioning

filter.

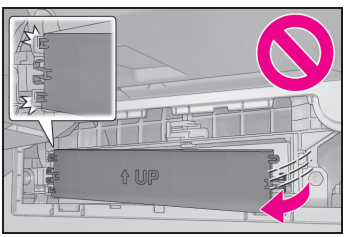
NOTICE

■ When using the air conditioning system

Make sure that a filter is always installed. Using the air conditioning system without a filter may cause damage to the system.

■ To prevent damage to the filter cover

When moving the filter cover in the direction of arrow to release the fitting, pay attention not to apply excessive force to the claws. Otherwise, the claws may be damaged.



Electronic key battery

Replace the battery with a new one if it is depleted.
As the key may be damaged if the following procedure is not performed properly, it is recommended that key battery replacement be performed by your Lexus dealer.

■ If the electronic key battery is depleted

The following symptoms may occur:

- The smart access system with push-button start and wireless remote control will not function properly.
- The operational range will be reduced.

■ When the card key battery needs to be replaced (if equipped)

The battery for the card key is available only at Lexus dealers. Your Lexus dealer can replace the battery for you.

Items to prepare

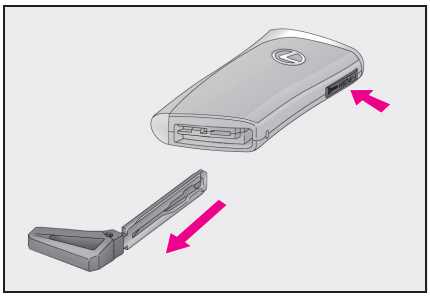
- Flathead screwdriver
- Small flathead screwdriver
- Lithium battery CR2032

■ Use a CR2032 lithium battery

- Batteries can be purchased at your Lexus dealer, local electrical appliance shops or camera stores.
- Replace only with the same or equivalent type recommended by the manufacturer.
- Dispose of used batteries according to local laws.

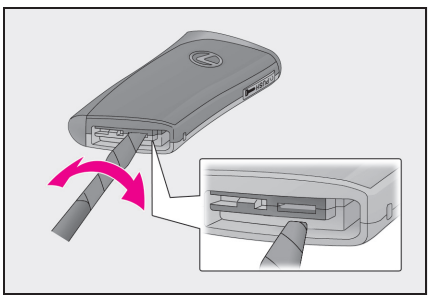
Replacing the battery

1 Take out the mechanical key.



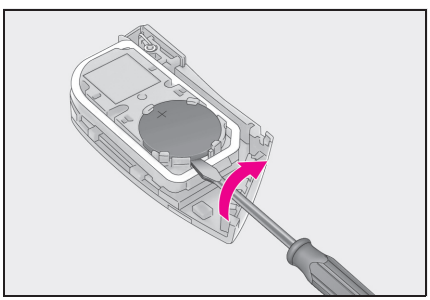
2 Remove the cover.

To prevent damage to the key, cover the tip of the flathead screwdriver with a tape.



3 Remove the depleted battery.

Insert a new battery with the "+" terminal facing up.



WARNING

■ Battery precautions

Observe the following precautions.Failure to do so may result in death or serious injury.

- Do not swallow the battery. Doing so may cause chemical burns.
- A coin battery or button battery is used in the electronic key. If a battery is swallowed, it may cause severe chemical burns in as little as 2 hours and may result in death or serious injury.
- Keep away new and removed batteries from children.
- If the cover cannot be firmly closed, stop using the electronic key and stow the key in the place where children cannot reach, and then contact your Lexus dealer.
- If you accidentally swallow a battery or put a battery into a part of your body, get emergency medical attention immediately.

■ To prevent battery explosion or leakage of flammable liquid or gas

- Replace the battery with a new battery of the same type. If a wrong type of battery is used, it may explode.
- Do not expose batteries to extremely low pressure due to high altitude or extremely high temperatures.
- Do not burn, break or cut a battery.

NOTICE

■ When replacing the battery

Use a flathead screwdriver of appropriate size. Applying excessive force may deform or damage the cover.

NOTICE

■ For normal operation after replacing the battery

Observe the following precautions to prevent accidents:

- Always work with dry hands. Moisture may cause the battery to rust.
- Do not touch or move any other component inside the remote control.
- Do not bend either of the battery terminals.

Checking and replacing fuses

If any of the electrical components do not operate, a fuse may have blown. If this happens, check and replace the fuses as necessary.

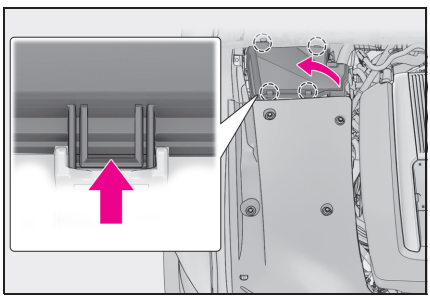
Checking and replacing fuses

1 Turn the engine switch off.

2 Open the fuse box cover.

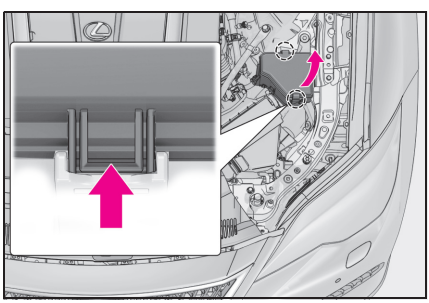
▶ Engine compartment: type A fuse box

Remove the service cover (→P.411) and push the tabs in and lift the lid off.



▶ Engine compartment: type B fuse box

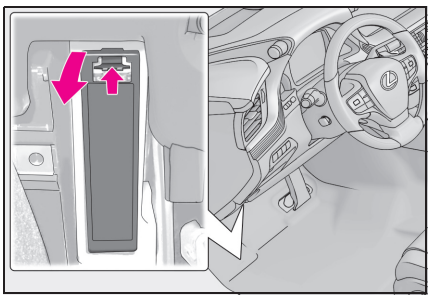
Remove the engine compartment cover (→P.410) and push the tabs in and lift the lid off.



▶ Driver's side instrument panel

Push the tab in and remove the lid.

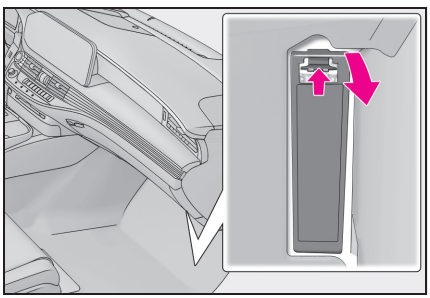
Make sure to push the tab in during removal or installation.



▶ Passenger's side instrument panel

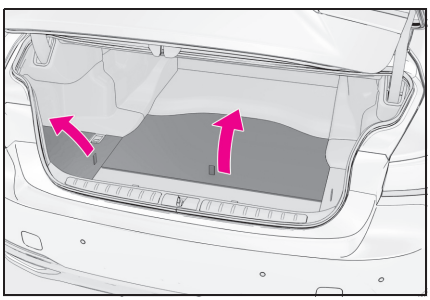
Push the tab in and remove the lid.

Make sure to push the tab in during removal or installation.

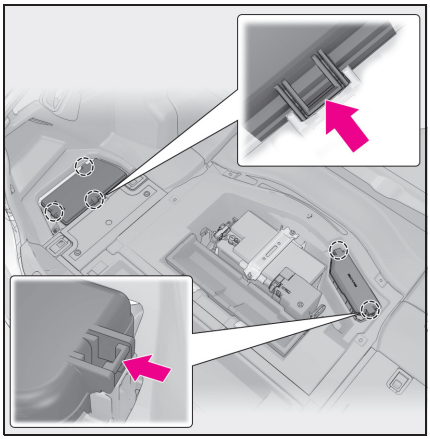


▶ Trunk

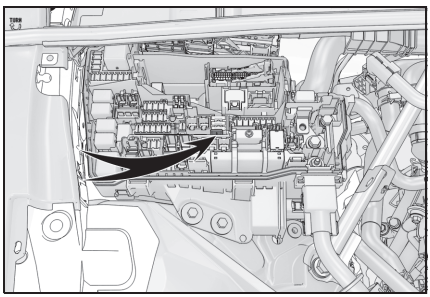
Remove the luggage mat. (→P.368)



Push the tab in and lift the lid off.



3 Remove the fuse with the pullout tool.
Only type A fuse can be removed using the pullout tool.

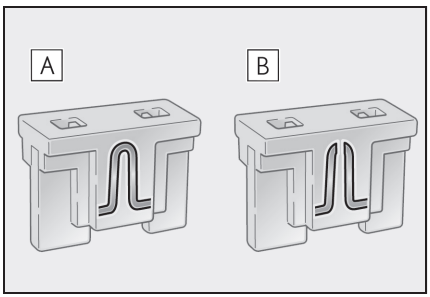


4 Check if the fuse is blown.

Type A and B:
Replace the blown fuse with a new fuse of an appropriate amperage rating. The amperage rating can be found on the fuse box lid.

Type C and D:
Contact your Lexus dealer.

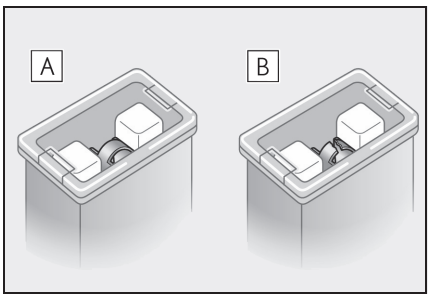
▶ Type A



A Normal fuse

B Blown fuse

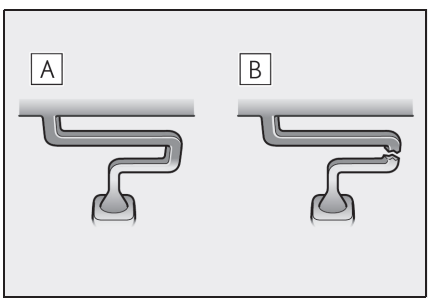
▶ Type B



A Normal fuse

B Blown fuse

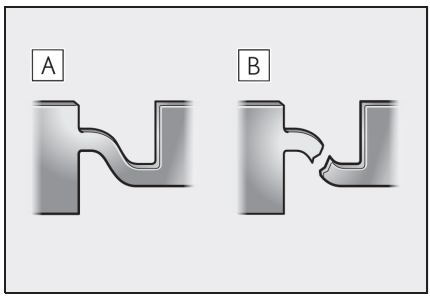
▶ Type C



A Normal fuse

B Blown fuse

▶ Type D



A Normal fuse

B Blown fuse

After a fuse is replaced

- When installing the lid, make sure that the tab is installed securely.
- If the lights do not turn on even after the fuse has been replaced, a bulb may need replacement.
- If the replaced fuse blows again, have the vehicle inspected by your Lexus dealer.

If there is an overload in a circuit

The fuses are designed to blow, protecting the wiring harness from damage.

WARNING

To prevent system breakdowns and vehicle fire

Observe the following precautions. Failure to do so may cause damage to the vehicle, and possibly a fire or injury.

- Never use a fuse of a higher amperage rating than that indicated, or use any other object in place of a fuse.
- Always use a genuine Lexus fuse or equivalent.
  Never replace a fuse with a wire, even as a temporary fix.
- Do not modify the fuses or fuse boxes.

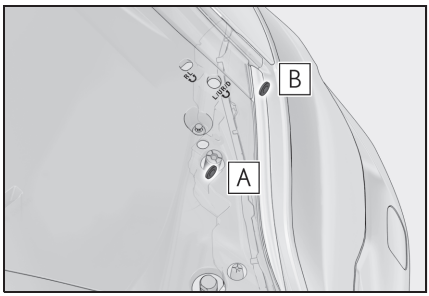
NOTICE

■ Before replacing fuses

Have the cause of electrical overload determined and repaired by your Lexus dealer as soon as possible.

Headlight aim

Vertical movement adjusting bolts



A Adjustment bolt A

B Adjustment bolt B

Before checking the headlight aim

1 Make sure the vehicle has a full tank of gasoline and the area around the headlight is not deformed.

2 Park the vehicle on level ground.

3 Sit in the driver's seat.

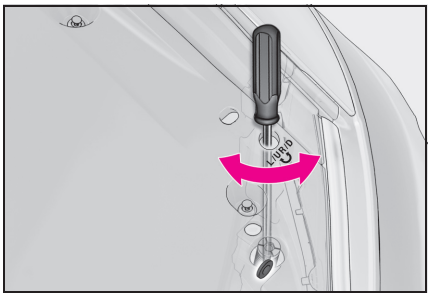
4 Bounce the vehicle several times.

Adjusting the headlight aim

1 Using a phillips-head screwdriver, turn bolt A in either direction.

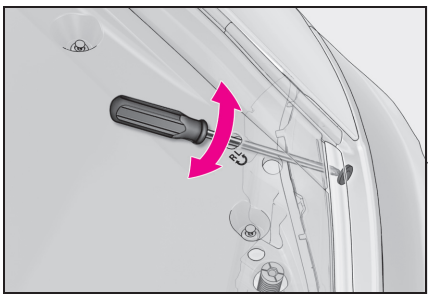
Remember the turning direction and the

number of turns.



2 Turn bolt B the same number of turns and in the same direction as step 1.

If the headlight cannot be adjusted using this procedure, take the vehicle to your Lexus dealer to adjust the headlight aim.



Light bulbs

If any lights burn out, have it replaced by your Lexus dealer.

LED Lights

The lights consist of a number of LEDs. If any of the LEDs burn out, take your vehicle to your Lexus dealer to have the light replaced.

Condensation build-up on the inside of the lens

Temporary condensation build-up on the inside of the headlight lens does not indicate a malfunction. Contact your Lexus dealer for more information in the following situations:

- Large drops of water have built up on the inside of the lens.
- Water has built up inside the headlight.

7-1. Essential information

Emergency flashers..... 448

If your vehicle has to be stopped in an emergency..... 448

If the vehicle is submerged or water on the road is rising .. 449

7-2. Steps to take in an emergency

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Fuel pump shut off system 456

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If the vehicle battery is discharged 478

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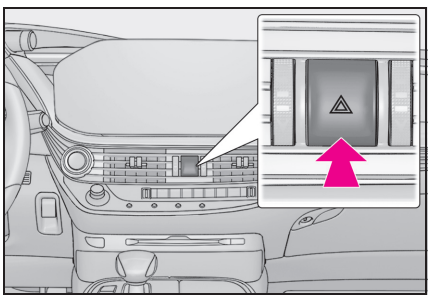
Emergency flashers

The emergency flashers are used to warn other drivers when the vehicle has to be stopped on the road due to a breakdown, etc.

Operating instructions

Press the switch to flash all of the turn signal lights.

To turn them off, press the switch once again.



■ Emergency flashers

- If the emergency flashers are used for a long time while the engine is not running, the battery may discharge.
- If any of the SRS airbags deploy (inflate) or in the event of a strong rear impact, the emergency flashers will turn on automatically.
  The emergency flashers will turn off automatically after operating for approximately 20 minutes. To manually turn the emergency flashers off, press the switch twice.
  (The emergency flashers may not turn on automatically depending on the force of the impact and conditions of the collision.)

If your vehicle has to be stopped in an emergency

Only in an emergency, such as if it becomes impossible to stop the vehicle in the normal way, stop the vehicle using the following procedure:

Stopping the vehicle

1 Steadily step on the brake pedal with both feet and firmly depress it.

Do not pump the brake pedal repeatedly as this will increase the effort required to slow the vehicle.

2 Shift the shift position to N.

▶ If the shift position is shifted to N

3 After slowing down, stop the vehicle in a safe place by the road.

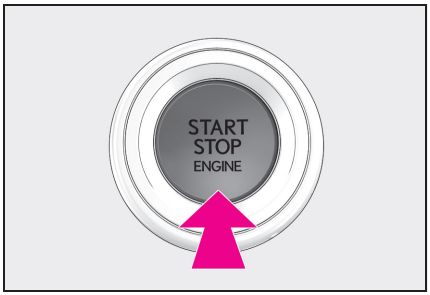
4 Stop the engine.

▶ If the shift position cannot be shifted to N

3 Keep depressing the brake pedal with both feet to reduce vehicle speed as much as possible.

4 To stop the engine, press and hold the engine switch for 2 consecutive

seconds or more, or press it briefly 3 times or more in succession.



5 Stop the vehicle in a safe place by the road.

WARNING

■ If the engine has to be turned off while driving

Power assist for the steering wheel will be lost, making the steering wheel heavier to turn. Decelerate as much as possible before turning off the engine.

If the vehicle is submerged or water on the road is rising

This vehicle is not designed to be able to drive on roads that are deeply flooded with water. Do not drive on roads where the roads may be submerged or the water may be rising. It is dangerous to remain in the vehicle, if it is anticipated that the vehicle will be flooded or set adrift. Remain calm and follow the following.

- If the door can be opened, open the door and exit the vehicle.
- If the door cannot be opened, open the window using the power window switch and ensure an escape route.
- If the window can be opened, exit the vehicle through the window.
- If the door and window cannot be opened due to the rising water, remain calm, wait until the water level inside the vehicle rises to the point that the water pressure inside of the vehicle equals the water pressure outside of the vehicle and then open the door after waiting for the rising water to enter the vehicle, and exit the vehicle.

When the outside water level exceeds half the height of the door, the door cannot be opened from the inside due to water pressure.

■ Water level exceeds the floor

When the water level exceeds the floor and time has passed, the electrical equipment will get damaged, the power windows will

not operate, the engine stop, and the vehicle may not be able to get moving.

Using an emergency escape hammer*

Laminated glass is used in the windshield and the side windows on this vehicle. Laminated glass cannot be shattered with an emergency hammer*.

*: Contact your Lexus dealer or aftermarket accessory manufacturer for further information about an emergency hammer.

WARNING

Caution while driving

Do not drive on roads where the roads may be submerged or the water may be rising. Otherwise the vehicle may be damaged and cannot move, as well as become flooded and set adrift, which may lead to death.

If your vehicle needs to be towed

If towing is necessary, we recommend having your vehicle towed by your Lexus dealer or commercial towing service, using a wheel-lift type truck or flatbed truck.

Use a safety chain system for all towing, and abide by all state/provincial and local laws.

If towing your vehicle with a wheel-lift type truck from the front, the vehicle's rear wheels and axles must be in good conditions. (→P.451, 453) If they are damaged, use a towing dolly or flatbed truck.

For AWD models: If towing your vehicle with a wheel-lift type truck, use a towing dolly. (→P.451, 453)

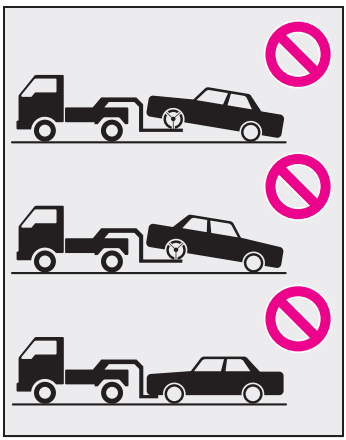
WARNING

Observe the following precautions. Failure to do so may result in death or serious injury.

When towing the vehicle

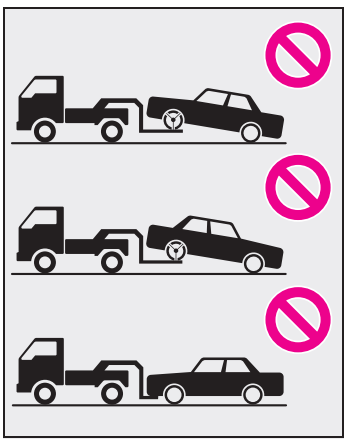
▶ 2WD models

Be sure to transport the vehicle with all four wheels raised off the ground. If the vehicle is towed with the tires contacting the ground, the drivetrain and related parts may be damaged or an accident may occur due to a change in direction of the vehicle.



▶ AWD models

Be sure to transport the vehicle with all four wheels raised off the ground. If the vehicle is towed with the tires contacting the ground, the drivetrain or related parts may be damaged, the vehicle may fly off the truck.



WARNING

■ While towing

- When towing using cables or chains, avoid sudden starts, etc. which place excessive stress on the towing eyelets, cables or chains. The towing eyelets, cables or chains may become damaged, broken debris may hit people, and cause serious damage.
- Vehicles with electronically modulated air suspension: Make sure to disable all functions of the vehicle height control of the electronically modulated air suspension. Otherwise, the vehicle height may change and part of your body may be caught under the vehicle, possibly causing injury. (→P.329)
- Do not perform any of the following as doing so may cause the parking lock mechanism to engage, locking the rear wheels and possibly leading to an accident resulting in death or serious injury:
  - Unfasten the driver's seat belt and open the driver's door.
  - Turn the engine switch off.

■ Installing towing eyelets to the vehicle

Make sure that towing eyelets are installed securely.
If not securely installed, towing eyelets may come loose during towing.

NOTICE

■ To prevent damage to the vehicle when towing using a wheel-lift type truck

When raising the vehicle, ensure adequate ground clearance for towing at the opposite end of the raised vehicle. Without adequate clearance, the vehicle could be damaged while being towed.

■ To prevent damage to the vehicle when towing with a sling-type truck

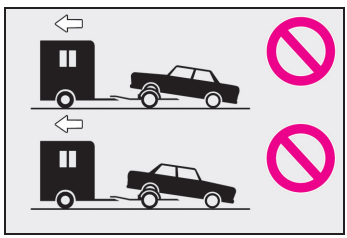
Do not tow with a sling-type truck, either from the front or rear.

■ To prevent damage to the vehicle during emergency towing

Do not secure cables or chains to the suspension components.

■ Recreational towing (behind motor home, etc.) (AWD models)

Never dinghy tow your vehicle to prevent causing serious damage to the AWD system and transmission. (→P.168)



Situations when it is not possible to be towed by another vehicle

In the following situations, it is not possible to be towed by another vehicle using cables or chains, as the rear wheels may be locked due to the parking lock. Contact your Lexus dealer or commercial towing service.

- There is a malfunction in the shift control system. (→P.172, 467)
- There is a malfunction in the engine immobilizer system. (→P.61)
- There is a malfunction in the smart access system with push-button start. (→P.475)
- The battery is discharged.

(→P.478)

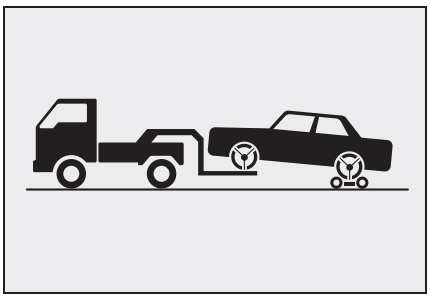
Situations when it is necessary to contact dealers before towing

The following may indicate a problem with your transmission. Contact your Lexus dealer or commercial towing service before towing.

- The engine is running but the vehicle does not move.
- The vehicle makes an abnormal sound.

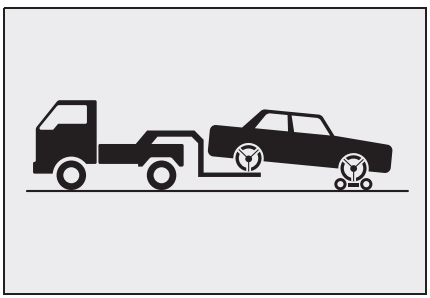
Towing with a wheel-lift type truck

▶ From the front



Use a towing dolly under the rear wheels.

▶ From the rear

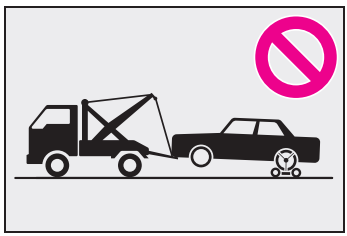


Use a towing dolly under the front wheels.

NOTICE

■ Towing with a sling-type truck

Do not tow with a sling-type truck to prevent body damage.



Using a flatbed truck

When using a flat-bed truck to transport the vehicle, use tire strapping belts. Refer to the owner's manual of the flat-bed truck for the tire strapping method.

In order to suppress vehicle movement during transportation, set the parking brake and turn the engine switch off.

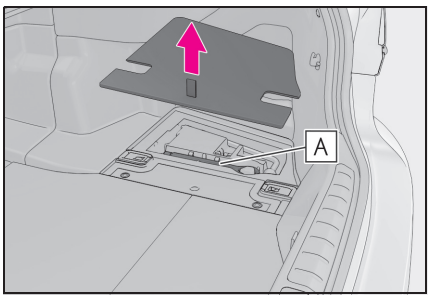
Emergency towing

If a tow truck is not available in an emergency, your vehicle may be temporarily towed using cables or chains secured to the emergency towing eyelets. This should only be attempted on hard surfaced roads for short distances at under 18 mph (30 km/h).
A driver must be in the vehicle to steer and operate the brakes. The vehicle's wheels, drive train, axles, steering and brakes must be in good condition.

Emergency towing procedure

To have your vehicle towed by another vehicle, the towing eyelet must be installed to your vehicle. Install the towing eyelet using the following procedure.

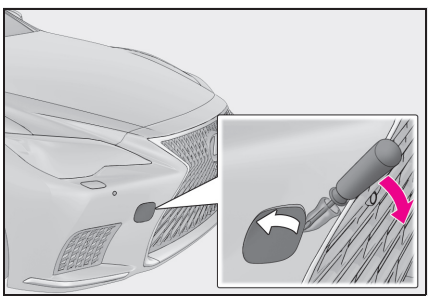
1 Take out the towing eyelet.



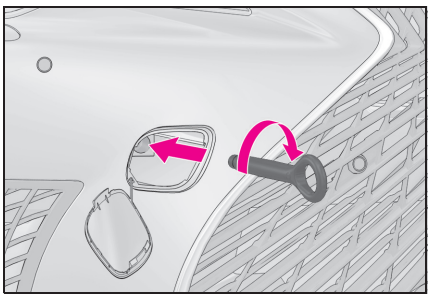
A Towing eyelet

2 Remove the eyelet cover using a flathead screwdriver.

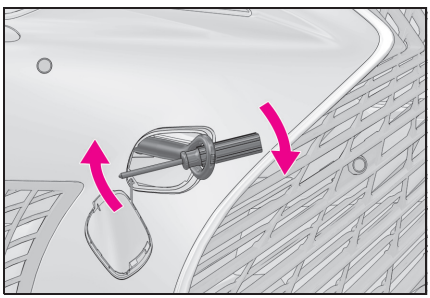
To protect the bodywork, place a rag between the screwdriver and the vehicle body as shown in the illustration.



3 Insert the towing eyelet into the hole and tighten partially by hand.



4 Tighten down the towing eyelet securely using a phillips-head screwdriver or hard metal bar.



5 Securely attach cables or chains to the towing eyelet.

Take care not to damage the vehicle body.

6 Enter the vehicle being towed and start the engine.

If the engine does not start, turn the engine switch to IGNITION ON mode.

7 Shift the shift position to N and release the parking brake.

Turn automatic mode off. (→P.181)

■ While towing

If the engine is not running, the power assist for the brakes and steering will not function, making steering and braking more difficult.

■ Wheel bolt wrench

Wheel bolt wrench can be purchased at your Lexus dealer.

If you think something is wrong

If you notice any of the following symptoms, your vehicle probably needs adjustment or repair. Contact your Lexus dealer as soon as possible.

Visible symptoms

- Fluid leaks under the vehicle. (Water dripping from the air conditioning after use is normal.)
- Flat-looking tires or uneven tire wear
- Engine coolant temperature gauge continually points higher than normal.

Audible symptoms

- Changes in exhaust sound
- Excessive tire squeal when cornering
- Strange noises related to the suspension system
- Pinging or other noises related to the engine

Operational symptoms

- Engine missing, stumbling or running roughly
- Appreciable loss of power
- Vehicle pulls heavily to one side when braking
- Vehicle pulls heavily to one side when driving on a level road
- Loss of brake effectiveness, spongy feeling, pedal almost touches the floor

Fuel pump shut off system

To minimize the risk of fuel leakage when the engine stalls or when an airbag inflates upon collision, the fuel pump shut off system stops the supply of fuel to the engine.

Restarting the engine

Follow the procedure below to restart the engine after the system is activated.

1 Turn the engine switch to ACCESSORY mode or turn it off.

2 Restart the engine.

NOTICE

■ **Before starting the engine**

Inspect the ground under the vehicle. If you find that fuel has leaked onto the ground, the fuel system has been damaged and is in need of repair. Do not restart the engine.

If a warning light turns on or a warning buzzer sounds

Calmly perform the following actions if any of the warning lights comes on or flashes. If a light comes on or flashes, but then goes off, this does not necessarily indicate a malfunction in the system. However, if this continues to occur, have the vehicle inspected by your Lexus dealer.

Actions to the warning lights or warning buzzers

■ Brake system warning light (warning buzzer)

Warning light	Details/Actions
BRAKE (U.S.A.) or (red) (Canada)	Indicates that: ● The brake fluid level is low; or ● The brake system is malfunctioning → **Immediately stop the vehicle in a safe place and contact your Lexus dealer. Continuing to drive the vehicle may be dangerous.** Indicates that the brake pads are worn out (only the right-side pads can be detected) → **Have the vehicle inspected by your Lexus dealer.**

■ Brake system warning light (warning buzzer)

Warning light	Details/Actions
(yellow)	Indicates a malfunction in: ● The electric parking brake → **Have the vehicle inspected by your Lexus dealer immediately.**

■ High coolant temperature warning light* (warning buzzer)

Warning light	Details/Actions
	Indicates that the engine coolant temperature is too high → **Immediately stop the vehicle in a safe place.** **Handling method (→P.484)**

*: This light illuminates on the multi-information display.

■ Charging system warning light* (warning buzzer)

Warning light	Details/Actions
	Indicates a malfunction in the vehicle's charging system → **Immediately stop the vehicle in a safe place and contact your Lexus dealer.**

*: This light illuminates on the multi-information display.

■ Low engine oil pressure warning light* (warning buzzer)

Warning light	Details/Actions
	Indicates that the engine oil pressure is too low → **Immediately stop the vehicle in a safe place and contact your Lexus dealer.**

*: This light illuminates on the multi-information display.

■ Malfunction indicator lamp (warning buzzer)

Warning light	Details/Actions
 (U.S.A.) or  (Canada)	Indicates a malfunction in: ● The electronic engine control system; ● The electronic throttle control system; or ● The electronic automatic transmission control system → **Immediately stop the vehicle in a safe place and contact your Lexus dealer.**

■ SRS warning light (warning buzzer)

Warning light	Details/Actions
	Indicates a malfunction in: ● The SRS airbag system; ● The front passenger occupant classification system; or ● The seat belt pretensioner system → **Have the vehicle inspected by your Lexus dealer immediately.**

■ Pop Up Hood warning light (warning buzzer)

Warning light	Details/Actions
	Indicates that the Pop Up Hood system has operated → **The Pop Up Hood system cannot be reused once it has operated. Have it replaced by your Lexus dealer.** Indicates a malfunction in the Pop Up Hood system → **Have the vehicle inspected by your Lexus dealer immediately.**

■ ABS warning light (warning buzzer)

Warning light	Details/Actions
 (U.S.A.) or  (Canada)	Indicates a malfunction in: ● The ABS; or ● The brake assist system → **Have the vehicle inspected by your Lexus dealer immediately.**

■ Inappropriate pedal operation warning light* (warning buzzer)

Warning light	Details/Actions
	When a buzzer sounds: ● Brake Override System is malfunctioning ● Drive-Start Control is malfunctioning ● Drive-Start Control is operating → **Follow the instructions displayed on the multi-information display.** When a buzzer does not sound: Brake Override System is operating. → **Release the accelerator pedal and depress the brake pedal.**

*: This light illuminates on the multi-information display.

■ Electric power steering system warning light (warning buzzer)

Warning light	Details/Actions
 (red) or  (yellow)	Indicates a malfunction in the EPS (Electric Power Steering) system → **Have the vehicle inspected by your Lexus dealer immediately.**

■ Low fuel level warning light

Warning light	Details/Actions
	Indicates that remaining fuel is approximately 3.4 gal. (13 L, 2.8 Imp. gal.) or less → **Refuel the vehicle.**

■ Driver's and front passenger's seat belt reminder light (warning buzzer)*

Warning light	Details/Actions
	Warns the driver and/or front passenger to fasten their seat belts → **Fasten the seat belt.** **If the front passenger's seat is occupied, the front passenger's seat belt also needs to be fastened to make the warning light (warning buzzer) turn off.**

*: Driver's seat belt warning buzzer:

The driver's seat belt warning buzzer sounds to alert the driver that his or her seat belt is not fastened. Once the engine switch is turned to IGNITION ON mode, the buzzer sounds. If the seat belt is still unfastened, the buzzer sounds intermittently for a certain period of time after the vehicle reaches a certain speed.

Front passenger's seat belt warning buzzer:

The front passenger's seat belt warning buzzer sounds to alert the front passenger that his or her seat belt is not fastened. If the seat belt is unfastened, the buzzer sounds intermittently for a certain period of time after the vehicle reaches a certain speed.

■ Rear passengers' seat belt reminder lights (warning buzzer)*

Warning light	Details/Actions
	Warns the rear passengers to fasten their seat belts → **Fasten the seat belt.**

*: Rear passengers' seat belt warning buzzer:

The rear passengers' seat belt warning buzzer sounds to alert the rear passenger that his or her seat belt is not fastened. If the seat belt is unfastened, the buzzer sounds intermittently for a certain period of time, after the seat belt is fastened and unfastened and the vehicle reaches a certain speed.

■ Tire pressure warning light (warning buzzer)

Warning light	Details/Actions
	When the light comes on (a buzzer sounds): ● Low tire inflation pressure from natural causes → **After the temperature of the tires has lowered sufficiently, check the inflation pressure of each tire and adjust them to the specified level.** ● Low tire inflation pressure from flat tire → **Immediately stop the vehicle in a safe place and perform the necessary actions. (→P.465)** When the light comes on after blinking for approximately 1 minute (a buzzer does not sounds): Malfunction in the tire pressure warning system → **Have the system checked by your Lexus dealer.**

■ Slip indicator

Warning light	Details/Actions
	Indicates a malfunction in: ● The VSC system; ● The TRAC system; ● The hill-start assist control system; ● The DRS system (if equipped) → **Have the vehicle inspected by your Lexus dealer immediately.**

■ Parking brake indicator (warning buzzer)

Warning light	Details/Actions
PARK (flashes) (U.S.A.) or (P) (flashes) (Canada)	It is possible that the parking brake is not fully engaged or released → **Operate the parking brake switch once again.** This light comes on the parking brake is not released. If the light turns off after the parking brakes is fully released, the system is operating normally. Indicates a malfunction in the parking brake system → **Have the vehicle inspected by your Lexus dealer immediately.**

■ Brake hold operated indicator (warning buzzer)

Warning light	Details/Actions
HOLD (flashes)	Indicates a malfunction in the brake hold system → **Have the vehicle inspected by your Lexus dealer immediately.**

■ Intuitive parking assist OFF indicator (warning buzzer)

Warning light	Details/Actions
P OFF (if equipped)	When a buzzer sounds: Indicates a malfunction in the intuitive parking assist function → **Have the vehicle inspected by your Lexus dealer immediately.** When a buzzer does not sounds: Indicates that the system is temporarily unavailable, possibly due to a sensor being dirty or covered with ice, etc. → **Follow the instructions displayed on the multi-information display.** (→P.468)

■ PCS warning light (warning buzzer)

Warning light	Details/Actions
OFF	Indicates a malfunction in the PCS (Pre-Collision System). → **Follow the instructions displayed on the multi-information display.** If the PCS (Pre-Collision System) or VSC (Vehicle Stability Control) system is disabled, the PCS warning light will illuminate.

■ LTA indicator (warning buzzer)

Warning light	Details/Actions
 (yellow)	Indicates a malfunction in the LTA (Lane Tracing Assist). → **Follow the instructions displayed on the multi-information display.**

■ LDA indicator (warning buzzer)

Warning light	Details/Actions
 (yellow)	Indicates a malfunction in the LDA (Lane Departure Alert). → **Follow the instructions displayed on the multi-information display.**

■ PDA indicator (warning buzzer)

Warning light	Details/Actions
 (yellow)	Indicates a malfunction in the PDA (Proactive Driving Assist). → **Follow the instructions displayed on the multi-information display.**

■ Dynamic radar cruise control indicator (warning buzzer)

Warning light	Details/Actions
 (yellow)	Indicates a malfunction in the dynamic radar cruise control. → **Follow the instructions displayed on the multi-information display.**

■ Cruise control indicator (warning buzzer)

Warning light	Details/Actions
 (yellow)	Indicates a malfunction in the cruise control. → **Follow the instructions displayed on the multi-information display.**

■ Driving assist information indicator

Warning light	Details/Actions
	Indicates either of the following systems may be malfunctioning. ● PCS (Pre-Collision System) ● LDA (Lane Departure Alert) → **Follow the instructions displayed on the multi-information display.** Indicates one of the following systems is malfunctioning or disabled. ● PKSB (Parking Support Brake)* ● RCD (Rear Camera Detection)* ● BSM (Blind Spot Monitor) ● RCTA (Rear cross traffic alert) ● Safe Exit Assist → **Follow the instructions displayed on the multi-information display.**

*: If equipped

■ Warning buzzer

In some cases, the buzzer may not be heard due to being in a noisy location or audio sound.

■ Front passenger detection sensor, seat belt reminder and warning buzzer

- If luggage is placed on the front passenger seat, the front passenger detection sensor may cause the warning light to flash and the warning buzzer to sound even if a passenger is not sitting in the seat.
- If a cushion is placed on the seat, the sensor may not detect a passenger, and the warning light may not operate properly.

■ SRS warning light

This warning light indicates problems with the following:

- Airbag sensor assembly
- Front impact sensors
- Side impact sensors (front door)
- Side impact sensors (front)
- Side impact sensors (rear)
- Front passenger occupant classification sensors
- Front passenger's seat belt buckle switch
- Rear seat belt buckle switches (if equipped)
- "AIR BAG ON" indicator light
- "AIR BAG OFF" indicator light
- Seat belt pretensioners
- SRS airbags
- SRS system related wiring harnesses and power sources

■ If the malfunction indicator lamp comes on while driving

First check the following:

- Is the fuel tank empty?
  If it is, fill the fuel tank immediately.
- Is the fuel tank cap loose?
  If it is, tighten it securely.

The light will go off after several driving trips.

If the light does not go off even after several trips, contact your Lexus dealer as soon as possible.

■ Electric power steering system warning light (warning buzzer)

When the battery charge becomes insufficient or the voltage temporarily drops, the electric power steering system warning light may come on and the warning buzzer may sound.

■ When the tire pressure warning light comes on

Inspect the tires to check if a tire is punctured.

If a tire is punctured: →P.472

If none of the tires are punctured:
Turn the engine switch off then turn it to IGNITION ON mode. Check if the tire pressure warning light comes on or blinks.

▶ If the tire pressure warning light blinks for approximately 1 minute then stays on

There may be a malfunction in the tire pressure warning system. Have the vehicle inspected by your Lexus dealer immediately.

▶ If the tire pressure warning light comes on

1 After the temperature of the tires has lowered sufficiently, check the inflation pressure of each tire and adjust them to the specified level.
2 If the warning light does not turn off even after several minutes have elapsed, check that the inflation pressure of each tire is at the specified level and perform the tire inflation pressure setting procedure. (→P.425)

If the warning light does not turn off even after several minutes have elapsed since performing the tire inflation pressure setting procedure, have the vehicle inspected by your Lexus dealer immediately.

■ The tire pressure warning light may come on due to natural causes

The tire pressure warning light may come on due to natural causes such as natural air leaks and tire inflation pressure changes caused by temperature. In this case, adjusting the tire inflation pressure will turn off the warning light (after a few minutes).

■ Conditions that the tire pressure warning system may not function properly

→P.423

WARNING

■ If both the ABS and the brake system warning lights remain on

Stop your vehicle in a safe place immediately and contact your Lexus dealer.
The vehicle will become extremely unstable during braking, and the ABS system may fail, which could cause an accident resulting in death or serious injury.

■ When the electric power steering system warning light comes on

When the light comes on yellow, the assist to the power steering is restricted.
When the light comes on red, the assist to the power steering is lost and handling operations of the steering wheel become extremely heavy.
When steering wheel operations are heavier than usual, grip the steering wheel firmly and operate it using more force than usual.

■ If the tire pressure warning light comes on

Be sure to observe the following precautions.
Failure to do so could cause a loss of vehicle control and result in death or serious injury.

- Decelerate to the lowest appropriate speed as soon as possible. Do not drive over 50 mph (80 km/h).
- Check and adjust the tire inflation pressure immediately.
- If the tire pressure warning light comes on even after tire inflation pressure adjustment, it is probable that you have a flat tire. Have the flat tire replaced by the nearest Lexus dealer.
- Avoid abrupt maneuvering and braking.
  If the vehicle tires deteriorate, you could lose control of the steering wheel or the brakes.

WARNING

■ If a blowout or sudden air leakage should occur

The tire pressure warning system may not activate immediately.

■ Maintenance of the tires

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label (tire and load information label). (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label [tire and load information label], you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS-tire pressure warning system) that illuminates a low tire pressure telltale (tire pressure warning light) when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale (tire pressure warning light) illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS (tire pressure warning system) is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale (tire pressure warning light).

Your vehicle has also been equipped with a TPMS (tire pressure warning system) malfunction indicator to indicate when the system is not operating properly. The TPMS (tire pressure warning system) malfunction indicator is combined with the low tire pressure telltale (tire pressure warning light). When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists. When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended.

TPMS (tire pressure warning system) malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS (tire pressure warning system) from functioning properly. Always check the TPMS (tire pressure warning system) malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS (tire pressure warning system) to continue to function properly.

NOTICE

■ To ensure the tire pressure warning system operates properly

Do not install tires with different specifications or makers, as the tire pressure warning system may not operate properly.

If a warning message is displayed

The multi-information display shows warnings for system malfunctions and incorrectly performed operations, and messages that indicate a need for maintenance.
When a message is displayed, perform the appropriate corrective action for the message.
If a warning message is displayed again after the appropriate actions have been performed, contact your Lexus dealer.
Additionally, if a warning light comes on or flashes at the same time that a warning message is displayed, take the appropriate corrective action for the warning light. (→P.457)

■ Warning messages

The warning messages explained below may differ from the actual messages according to operation conditions and vehicle specifications.

■ Warning buzzer

In some cases, the buzzer may not be heard due to being in a noisy location or audio sound.

■ If "Engine Oil Level Low Add or Replace" is displayed

The engine oil level is low. Check the level of the engine oil, and add if necessary. (→P.413)

This message may appear if the vehicle is stopped on a slope. Move the vehicle to a level surface and check to see if the message disappears.

■ If "Engine Stopped Steering Power Low" is displayed

This message is displayed if the engine is stopped while driving.

When steering wheel operations are heavier than usual, grip the steering wheel firmly and operate it using more force than usual.

■ If "Warming Up Maximum Vehicle Speed: 65 MPH" is displayed

The transmission is being warmed up and the vehicle is unable to be driven over 65 mph (110 km/h). Wait until the transmission warms up.

■ If "Auto Power OFF to Conserve Battery" is displayed

Power was turned off due to the automatic power off function. Next time when starting the engine, increase the engine speed slightly and maintain that level for approximately 5 minutes to recharge the battery.

■ If "Headlight System Malfunction Visit Your Dealer" is displayed

The following systems may be malfunctioning. Have the vehicle inspected by your Lexus dealer immediately.

- The LED headlight system
- AFS (Adaptive Front-lighting System)
- The automatic headlight leveling system
- AHB (Automatic High Beam)

■ If "System Malfunction Visit Your Dealer" is displayed

Indicates one of the following systems is disabled.

- PCS (Pre-Collision System)
- LDA (Lane Departure Alert)
- LTA (Lane Tracing Assist)
-  LCA (Lane Change Assist) (if equipped)
- AHB (Automatic High Beam)
- Dynamic radar cruise control
-  RSA (Road Sign Assist) (if equipped)
- PDA (Proactive Driving Assist)

- BSM (Blind Spot Monitor)
- RCTA (Rear Cross Traffic Alert)
- Safe Exit Assist
- Intuitive Parking Assist (if equipped)
- PKSB (Parking Support Brake) (if equipped)
- RCD (Rear camera detection) (if equipped)

Have the vehicle inspected by your Lexus dealer immediately.

■ **If "System Stopped See Owner's Manual" is displayed**

Indicates one of the following systems is disabled.

- PCS (Pre-Collision System)
- LDA (Lane Departure Alert)
- LTA (Lane Tracing Assist)
- LCA (Lane Change Assist) (if equipped)
- AHB (Automatic High Beam)
- Dynamic radar cruise control
- RSA (Road Sign Assist) (if equipped)
- PDA (Proactive Driving Assist)
- BSM (Blind Spot Monitor)
- RCTA (Rear Cross Traffic Alert)
- Safe Exit Assist
- Intuitive Parking Assist (if equipped)
- PKSB (Parking Support Brake) (if equipped)
- RCD (Rear camera detection) (if equipped)

Follow the following correction methods.

- Check the voltage of the battery
- Check the sensors that the Lexus Safety System+ 3 uses for foreign matter covering them. Remove them if any. (→P.198)
- Check if the trunk is open.

Indicates the sensors may not be operating properly.

- Intuitive Parking Assist (if equipped) (→P.274)
- PKSB (static objects front and rear of the vehicle) (if equipped) (→P.296)
- PKSB (moving vehicles rear of the vehicle) (if equipped) (→P.298)
- PKSB (pedestrians rear of the vehicle) (if equipped) (→P.300)
- PKSB (static objects around the vehicle) (if equipped) (→P.296)
- RCD (if equipped) (→P.288)
- BSM (Blind Spot Monitor) (→P.267)
- RCTA (Rear Cross Traffic Alert) (→P.284)
- Safe Exit Assist (→P.271)

Check the rear bumper around the sensors (→P.264) used by the BSM, RCTA, Safe Exit Assist for foreign matter covering them. Remove them if any.

Check the sensors including camera sensors used by the Intuitive Parking Assist, and PKSB, for foreign matter covering them. Remove them if any.

When problems are solved and the sensors are operational, this indication may disappear by itself.

■ **If "System Stopped Front Camera Low Visibility See Owner's Manual" is displayed**

Indicates one of the following systems is disabled.

- PCS (Pre-Collision System)
- LDA (Lane Departure Alert)
- LTA (Lane Tracing Assist)
- LCA (Lane Change Assist) (if equipped)
- AHB (Automatic High Beam)
- Dynamic radar cruise control
- RSA (Road Sign Assist) (if equipped)
- PDA (Proactive Driving Assist)

Follow the following correction methods.

- Using the windshield wipers, remove the dirt or foreign matter from the windshield.
- Using the air conditioning system, defog the windshield.
- Close the hood, remove any stickers, etc. to clear the obstruction in front of the front camera.

If "System Stopped Front Camera Out of Temperature Range Wait until Normal Temperature" is displayed

Indicates one of the following systems is disabled.

- PCS (Pre-Collision System)
- LDA (Lane Departure Alert)
- LTA (Lane Tracing Assist)
- LCA (Lane Change Assist) (if equipped)
- AHB (Automatic High Beam)
- Dynamic radar cruise control
- RSA (Road Sign Assist) (if equipped)
- PDA (Proactive Driving Assist)

Follow the following correction methods.

- If the front camera is hot, such as after the vehicle is parked in the sun, use the air conditioning system to decrease the temperature around the front camera
- If a sunshade was used when the vehicle was parked, depending on its type, the sunlight reflected from the surface of the sunshade may cause the temperature of the front camera to become excessively high
- If the front camera is cold, such after the vehicle is parked in an extremely cold environment, use the air conditioning system to increase the temperature around the front camera

If "System Stopped Front Radar Sensor Blocked Clean Radar Sensor" is displayed

Indicates one of the following systems is disabled.

- PCS (Pre-Collision System)
- LDA (Lane Departure Alert)
- LTA (Lane Tracing Assist)
- LCA (Lane Change Assist) (if equipped)
- AHB (Automatic High Beam)
- Dynamic radar cruise control
- PDA (Proactive Driving Assist)

Follow the following correction methods.

- Check if there is any foreign matter attached to the radar sensor or radar sensor cover and clean them if necessary (→P.199)
- This message may be displayed when driving in an open area with few nearby vehicles or structures, such as a desert, grasslands, suburbs, etc. The message may be cleared by driving the vehicle in an area with structures, vehicles, etc. nearby.

If "System Stopped Front Radar Sensor Out of Temperature Range Wait until Normal Temperature" is displayed

Indicates one of the following systems is disabled.

- PCS (Pre-Collision System)
- LDA (Lane Departure Alert)
- LTA (Lane Tracing Assist)
- LCA (Lane Change Assist) (if equipped)
- AHB (Automatic High Beam)
- Dynamic radar cruise control
- PDA (Proactive Driving Assist)

The temperature of the radar sensor is outside of the operating range. Wait for the temperature to become appropriate.

If "System Stopped Front Radar In Self Calibration See Owner's Manual" is displayed

Indicates one of the following systems is disabled.

- PCS (Pre-Collision System)
- LDA (Lane Departure Alert)
- LTA (Lane Tracing Assist)

- LCA (Lane Change Assist) (if equipped)
- AHB (Automatic High Beam)
- Dynamic radar cruise control
- PDA (Proactive Driving Assist)

Follow the following correction methods.

- Check if there is any foreign matter attached to the radar sensor or radar sensor cover and clean them if necessary (→P.199)
- The radar sensor may be misaligned and will be adjusted automatically while driving. Continue driving for a while.

If "Unavailable Activation Condition not Satisfied See Owner's Manual" is displayed

The LCA function cannot be used as the operating conditions have not been met. (→P.223)

Operate the turn signal lever again after all of the operating conditions are met.

If "Cruise Control Unavailable See Owner's Manual" is displayed

Indicates one of the following systems is disabled.

- Dynamic radar cruise control
- Cruise control

A message is displayed when the driving assist switch is pushed repeatedly.

Press the driving assist switch quickly and firmly.

If "Driver Monitor Out of Temperature Range Wait until Normal Temperature" is displayed

Indicates one of the following systems is disabled.

- Driver monitor (if equipped)
- Traffic Jam Assist (if equipped)

The temperature of the driver monitor camera is outside of the operating range. Wait for the temperature to become appropriate.

If "Driver Monitor Unavailable See Owner's Manual" is displayed

The lens of the driver monitor camera may be dirty.

When there is dirt on the camera lens, clean it with a dry, soft cloth so as to not damage it.

If "Parking Assist Unavailable Sensor Blocked" is displayed

A sensor may be covered with water drops, ice, snow, dirt, etc. Remove the water drops, ice, snow, dirt, etc., from the sensor to return the system to normal.

Also, due to ice forming on a sensor at low temperatures, a warning message may be displayed or the sensor may not be able to detect an object. Once the ice melts, the system will return to normal.

If a sensor is dirty, the position of the dirty sensor will be shown on the display.

If an abnormality is displayed even though there are no water drops, ice, snow or dirt, the sensor may be operating abnormally. Have the vehicle inspected by your Lexus dealer.

If "Parking Assist Unavailable Low Visibility See Owner's Manual" is displayed

Indicates one of the following systems is disabled.

- RCD (Rear camera detection) (if equipped)
- PKSB (Parking Support Brake) (if equipped)

Remove any dirt or foreign matter from the rear camera.

If "Maintenance Required Soon" is displayed

Indicates that all maintenance according to the driven distance on the maintenance schedule* should be performed soon.

Comes on approximately 4500 miles (7200 km) after the message has been reset. If necessary, perform maintenance. Please reset the message after the maintenance is performed. (→P.400)

*: Refer to the separate "Scheduled Main-

tenance" or "Owner's Manual Supplement" for the maintenance interval applicable to your vehicle.

If "Maintenance Required" is displayed

Indicates that all maintenance is required to correspond to the driven distance on the maintenance schedule*.

Comes on approximately 5000 miles (8000 km) after the message has been reset. (The indicator will not work properly unless the message has been reset.) Perform the necessary maintenance. Please reset the message after the maintenance is performed. (→P.400)

*: Refer to the separate "Scheduled Maintenance" or "Owner's Manual Supplement" for the maintenance interval applicable to your vehicle.

If "Oil Maintenance Required Soon" is displayed

Indicates that the engine oil should be scheduled to be changed.

Check the engine oil and change it if necessary. After changing the engine oil, make sure to reset the message. (→P.414)

If "Oil Maintenance Required Visit Your Dealer" is displayed

Indicates that the engine oil should be changed.

Check and change the engine oil, and oil filter by your Lexus dealer. After changing the engine oil, make sure to reset the message. (→P.414)

If "Shift System Malfunction Shifting Unavailable Drive to a Safe Place and Stop" or "Shift System Malfunction Driving Unavailable" is displayed

There is a malfunction in the shift control system. Have the vehicle inspected by your Lexus dealer immediately.

If a message that indicates the need for the shift lever operation is displayed

To prevent the shift lever from being operated incorrectly or the vehicle from moving unexpectedly, a message that requires shifting the shift position may be displayed on the multi-information display. In that case, follow the instruction of the message and shift the shift position.

If a message that indicates the need for visiting your Lexus dealer is displayed

The system or part shown on the multi-information display is malfunctioning. Have the vehicle inspected by your Lexus dealer immediately.

If a message that indicates the need for referring to Owner's Manual is displayed

- If any of the following messages are shown on the multi-information display, follow the instructions.
  - "Engine Coolant Temp High" (→P.484)
  - "Battery Low" (→P.478)
  - "High Transmission Fluid Temp" (→P.173)
  - "Transmission Oil Temp High" (→P.173)
- If any of the following messages are shown on the multi-information display, it may indicate a malfunction. Have the vehicle inspected by your Lexus dealer immediately.
  - "Access System with Elec.Key malfunction"
  - "Shift System Malfunction Apply Parking Brake Securely When Parking See Owner's Manual"
  - "P Switch Malfunction Apply Parking Brake Securely When Parking See Owner's Manual"
  - "Shift System Unavailable Apply Parking Brake Securely When Parking See Owner's Manual"
  - "Shift System Malfunction See Owner's Manual"
  - "Shift System Malfunction Stop in a Safe Place See Owner's Manual"
  - "Battery Low Shifting Unavailable See Owner's Manual"
- If any of the following messages are shown on the multi-information display, it may indicate a malfunction. Immediately stop the vehicle and contact your Lexus dealer.
  - "Braking Power Low"
  - "12-Volt Battery Charging System Malfunction"
  - "Oil pressure low"

If you have a flat tire

Your vehicle is not equipped with a spare tire, but instead you can continue driving the vehicle with run-flat tires even if any tire goes flat.

In this case, slow down and drive with extra caution.

Run-flat tires

Take your vehicle to the nearest Lexus dealer or authorized tire dealer as soon as possible if any tire goes flat.

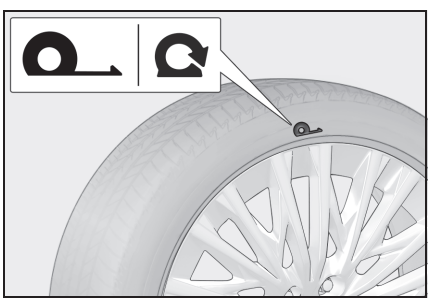
▶ For XXX/XXRXX size tires

The vehicle can be driven for a maximum of 50 miles (80 km) at a speed below 50 mph (80 km/h) after the tire pressure warning light comes on. (→P.461)

▶ For XXX/XXRFXX size tires

The vehicle can be driven for a maximum of 100 miles (160 km) at a speed below 50 mph (80 km/h) after the tire pressure warning light comes on. (→P.461)

A run-flat tire has a  or  mark on the side wall.



■ **In some conditions (such as at high temperatures)**

For XXX/XXRXX size tires: You cannot continue driving for up to 80 miles (50 km).

For XXX/XXRFXX size tires: You cannot continue driving for up to 160 miles (100 km).

■ **For the detailed information on run-flat tires**

See the tire warranty booklet.

NOTICE

■ **When replacing the tires**

When removing or fitting the wheels, tires or the tire pressure warning valve and transmitter, contact your Lexus dealer as the tire pressure warning valve and transmitter may be damaged if not handled correctly.

■ **When driving over bumps**

If a vehicle has a flat tire, the vehicle height will be lower than usual. Ensure that nothing strikes the bottom of the vehicle.

■ **To avoid damage to the tire pressure warning valves and transmitters**

When a tire is repaired with liquid sealants, the tire pressure warning valve and transmitter may not operate properly. If a liquid sealant is used, contact your Lexus dealer or other qualified service shop as soon as possible. Make sure to replace the tire pressure warning valve and transmitter when replacing the tire. (→P.423)

If the engine will not start

If the engine will not start even though correct starting procedures are being followed (→P.169), consider each of the following points:

The engine will not start even though the starter motor operates normally.

One of the following may be the cause of the problem:

- There may not be sufficient fuel in the vehicle's tank.
  Refuel the vehicle.
- The engine may be flooded.
  Try to restart the engine again following correct starting procedures. (→P.169)
- There may be a malfunction in the engine immobilizer system. (→P.61)
- There may be a malfunction in the shift control system.* (→P.172, 471)

*: It may not be possible to shift the shift position from P.

The starter motor turns over slowly, the interior lights and headlights are dim, or the horn does not sound or sounds at a low volume.

One of the following may be the cause of the problem:

- The battery may be discharged. (→P.478)
- The battery terminal connections may be loose or corroded. (→P.417)

The starter motor does not turn over

The engine starting system may be malfunctioning due to an electrical problem such as electronic key battery depletion or a blown fuse. However, an interim measure is available to start the engine. (→P.473)

The starter motor does not turn over, the interior lights and headlights do not turn on, or the horn does not sound.

One of the following may be the cause of the problem:

- One or both of the battery terminals may be disconnected. (→P.417)
- The battery may be discharged. (→P.478)

Contact your Lexus dealer if the problem cannot be repaired, or if repair procedures are unknown.

Starting the engine in an emergency

When the engine does not start, the following steps can be used as an interim measure to start the engine if the engine switch is functioning normally.
Do not use this starting procedure except in cases of emergency.

1 Press the parking brake switch to check that the parking brake is set. (→P.180)

Parking brake indicator will come on.

2 Turn the engine switch to ACCESSORY mode*1, 2.

3 Press and hold the engine switch for about 15 seconds while depressing the brake pedal firmly.

Even if the engine can be started using the above steps, the system may be malfunctioning. Have the vehicle inspected by your Lexus dealer.

*1: ACCESSORY mode can be enabled/disabled on the customize menu. (→P.510)

*2: When ACCESSORY mode is disabled, turn the engine switch to IGNITION ON mode then OFF, and start the engine as described in P.477within 5 seconds.

If you lose your keys

New genuine mechanical keys can be made by your Lexus dealer using another mechanical key and the key number stamped on your key number plate.

Keep the plate in a safe place such as your wallet, not in the vehicle.

NOTICE

■ When an electronic key is lost

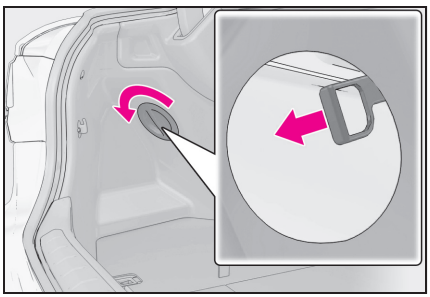
If the electronic key remains lost, the risk of vehicle theft increases significantly. Visit your Lexus dealer immediately with all remaining electronic keys and the card key (if equipped) that were provided with your vehicle.

If the fuel filler door cannot be opened

If the fuel filler door opener switch cannot be operated, contact your Lexus dealer to service the vehicle. In case where refueling is urgently necessary, the following procedure can be used to open the fuel filler door.

Opening the fuel filler door

Remove the cover inside the trunk and pull the lever.



If the electronic key does not operate properly

If communication between the electronic key and vehicle is interrupted (→P.110) or the electronic key cannot be used because the battery is depleted, the smart access system with push-button start and wireless remote control cannot be used. In such cases, the doors and trunk can be opened and the engine can be started by following the procedure below.

■ When the electronic key does not work properly

- Make sure that the smart access system with push-button start has not been disabled at your Lexus dealer. If it has been disabled, re-enable it.
- Check if battery-saving mode is set. If it is set, cancel the function. (→P.110)
- The electronic key function may be suspended. (→P.90)

NOTICE

■ In case of a smart access system with push-button start malfunction or other key-related problems

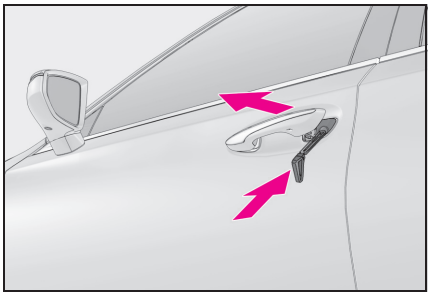
Take your vehicle with all the electronic keys provided with your vehicle to your Lexus dealer.

Locking and unlocking the doors, unlocking the trunk

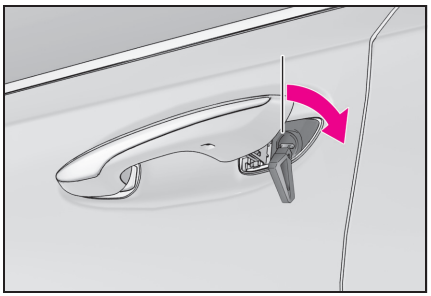
■ Unlocking the door

Use the mechanical key (→P.93) in order to perform the following operations:

1 Pull the driver's door handle and insert the mechanical key.



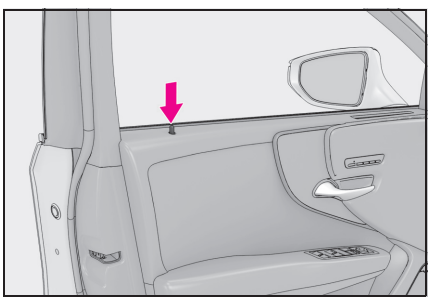
2 Unlock the door.



3 Remove the key, return the handle, and then pull the handle again.

■ Locking the door

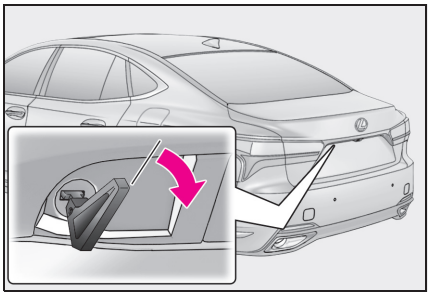
1 With the door open, push down the inside lock button.



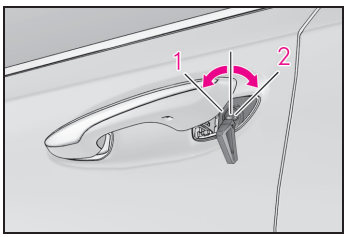
2 Close the door.

■ Trunk

Turn the mechanical key clockwise to open.



■ Key linked functions



1 Closes the windows and the moon roof* or panoramic moon roof* (turn and hold)

2 Opens the windows and the moon roof* or panoramic moon roof* (turn and hold)

These settings must be customized at your Lexus dealer.

*: If equipped

WARNING

■ When using the mechanical key and operating the power windows or the moon roof or panoramic moon roof

Operate the power window or the moon roof or panoramic moon roof after checking to make sure that there is no possibility of any passenger having any of their body parts caught in the window or the moon roof or panoramic moon roof. Also, do not allow children to operate the mechanical key. It is possible for children and other passengers to get caught in the power window or the moon roof or panoramic moon roof.

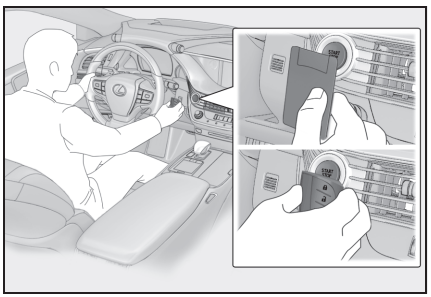
Starting the engine

1 Ensure that the shift position is in P and depress the brake pedal.

2 Touch the Lexus emblem side of the electronic key to the engine switch.

When the electronic key is detected, a buzzer sounds and the engine switch will turn to IGNITION ON mode.

When the smart access system with push-button start is deactivated in customization setting, the engine switch will turn to ACCESSORY mode.



3 Firmly depress the brake pedal and check that  is shown on the multi-information display.

4 Press the engine switch shortly and firmly.

In the event that the engine still cannot be started, contact your Lexus dealer.

■ Stopping the engine

Set the parking brake, shift the shift position to P and press the engine switch as you normally do when stopping the engine.

■ Electronic key battery

As the above procedure is a temporary measure, it is recommended that the electronic key battery be replaced immediately when the battery is depleted. (→P.439)

■ Alarm

If a door or trunk is unlocked using the mechanical key when the alarm system is set, the alarm may be triggered. (→P.62)

■ Changing engine switch modes

Release the brake pedal and press the engine switch in step **3** above. The engine does not start and modes will be changed each time the switch is pressed. (→P.171)

If the vehicle battery is discharged

The following procedures may be used to start the engine if the vehicle's battery is discharged.
You can also call your Lexus dealer or a qualified repair shop.

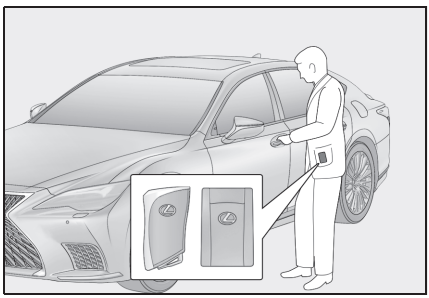
Restarting the engine

If you have a set of jumper (or booster) cables and a second vehicle with a 12-volt battery, you can jump start your vehicle by following the steps below.

▶ Method connecting jumper (or booster) cables to the battery

1 Confirm that the electronic key is being carried.

When connecting the jumper (or booster) cables, depending on the situation, the alarm may activate and doors locked. (→P.63)

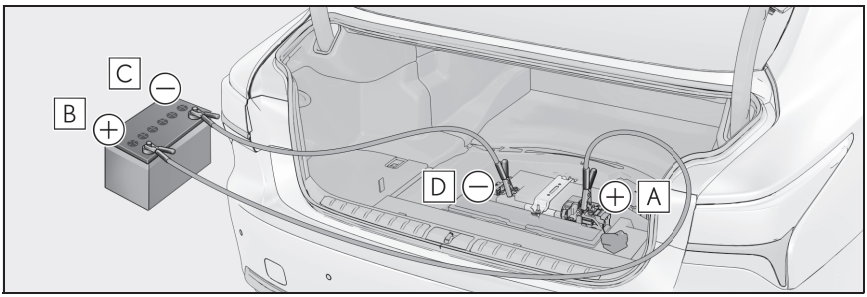


2 Open the trunk lid and remove the luggage mat. (→P.368)

In the event that the trunk opener cannot be used, use the mechanical key to open the trunk. (→P.475)

3 Connect a positive jumper cable clamp to A on your vehicle and connect the clamp on the other end of the positive cable to B on the second vehicle. Then,

connect a negative cable clamp to C on the second vehicle and connect the clamp at the other end of the negative cable to D.



A Positive (+) battery terminal (your vehicle)

B Positive (+) battery terminal (second vehicle)

C Negative (-) battery terminal (second vehicle)

D Negative (-) battery terminal (your vehicle)

4 Start the engine of the second vehicle. Increase the engine speed slightly and maintain at that level for approximately 5 minutes to recharge the battery of your vehicle.

5 Open and close any of the doors of your vehicle with the engine switch off.

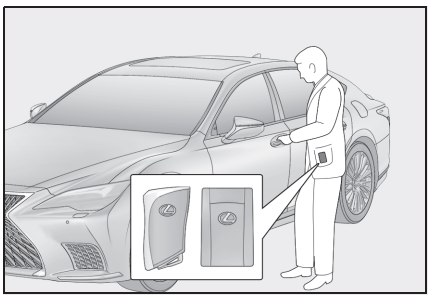
6 Maintain the engine speed of the second vehicle and start the engine of your vehicle by turning the engine switch to IGNITION ON mode.

7 Once the vehicle's engine has started, remove the jumper cables in the exact reverse order from which they were connected.

▶ Method connecting jumper (or booster) cables to the exclusive jump starting terminal

1 Confirm that the electronic key is being carried.

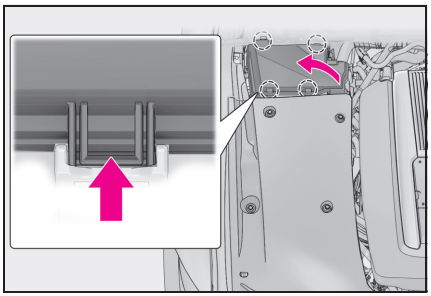
When connecting the jumper (or booster) cables, depending on the situation, the alarm may activate and doors locked. (→P.63)



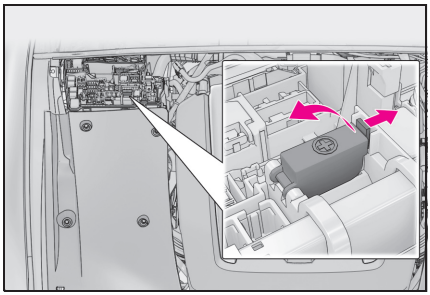
2 Open the hood. Remove the service cover. (→P.407, 411)

3 Open the fuse box cover.

Push the tab in and lift the lid off.

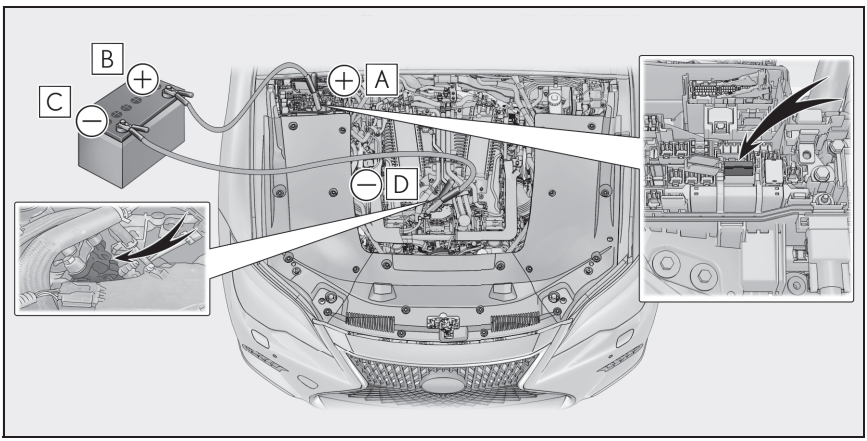


4 Open the exclusive jump starting terminal cover.



5 Remove the engine cover. (→P.410)

6 Connect a positive jumper cable clamp to A on your vehicle and connect the clamp on the other end of the positive cable to B on the second vehicle. Then, connect a negative cable clamp to C on the second vehicle and connect the clamp at the other end of the negative cable to D.
Use jumper cables that can reach the specified terminals and connecting point.



A Exclusive jump starting terminal (your vehicle)

B Positive (+) battery terminal (second vehicle)

C Negative (-) battery terminal (second vehicle)

D Metallic point shown in the illustration

7 Start the engine of the second vehicle. Increase the engine speed slightly and maintain at that level for approximately 5 minutes to recharge the battery of your vehicle.

8 Open and close any of the doors of your vehicle with the engine switch off.

9 Maintain the engine speed of the second vehicle and start the engine of your vehicle by turning the engine switch to IGNITION ON mode.

10 Once the vehicle's engine has started, remove the jumper cables in the exact reverse order from which they were connected.

11 Close the exclusive jump starting terminal cover, and reinstall the fuse box cover to its original position.

12 Install the service cover. (→P.411)

13 Install the engine cover. (→P.411)

Once the engine starts, have the vehicle inspected at your Lexus dealer as soon as possible.

■ **Starting the engine when the battery is discharged**

The engine cannot be started by push-starting.

■ **To prevent battery discharge**

- Turn off the headlights and the audio system while the engine is off.
- Turn off any unnecessary electrical components when the vehicle is running at a low speed for an extended period, such as in heavy traffic.

■ **When the battery is removed or discharged**

- Information stored in the ECU is cleared. When the battery is depleted, have the vehicle inspected at your Lexus dealer.
- Some systems may require initialization. (→P.524)

■ **When removing the battery terminals**

When the battery terminals are removed, the information stored in the ECU is cleared. Before removing the battery terminals, contact your Lexus dealer.

■ **Charging the battery**

The electricity stored in the battery will discharge gradually even when the vehicle is not in use, due to natural discharge and the draining effects of certain electrical appliances. If the vehicle is left for a long time, the battery may discharge, and the engine may be unable to start. (The battery recharges automatically during driving.)

■ **When recharging or replacing the battery**

- In some cases, it may not be possible to unlock the doors using the smart access system with push-button start when the battery is discharged. Use the wireless remote control or the mechanical key to lock or unlock the doors.
- The engine may not start on the first attempt after the battery has recharged but will start normally after the second attempt. This is not a malfunction.
- The engine switch mode is memorized by the vehicle. When the battery is reconnected, the system will return to the mode it was in before the battery was discharged. Before disconnecting the battery, turn the engine switch off.
  If you are unsure what mode the engine switch was in before the battery discharged, be especially careful when reconnecting the battery.
- If the battery discharges, it may not be possible to shift the shift position to other positions. In this case, the vehicle cannot be towed without lifting both rear wheels because the rear wheels will be locked.

■ **When replacing the battery**

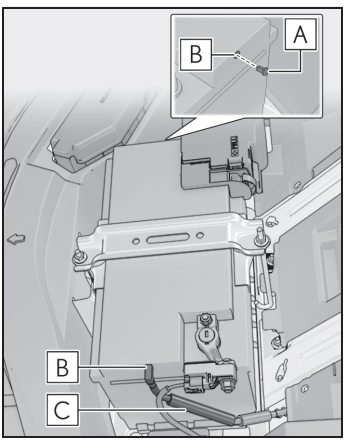
- Use a Central Degassing type battery (European Regulations).
- Use a battery with the same case size as the previous battery and an equivalent 20 hour rate capacity (20HR) or greater.
  - If the sizes differ, the battery cannot be properly secured.

- If the 20 hour rate capacity is low, even if the time period where the vehicle is not used is a short time, the battery may discharge and the engine may not be able to start.

● Use a battery with a handle. If a battery without a handle is used, removal is more difficult.

● After replacing, firmly attach the following items to the exhaust hole of the battery.

- Use the exhaust hose that was attached to the battery before replacing and confirm that it is firmly connected to the hole section of the vehicle.
- Use the exhaust hole plug included with the battery replaced or the one installed on the battery prior to the replacement. (Depending on the battery to be replaced, the exhaust hole may be plugged.)



A Exhaust hole plug

B Exhaust hole

C Exhaust hose

For details, consult your Lexus dealer.

WARNING

■ When removing the battery terminals

Always remove the negative (-) terminal first. If the positive (+) terminal contacts any metal in the surrounding area when the positive (+) terminal is removed, a spark may occur, leading to a fire in addition to electrical shocks and death or serious injury.

■ Avoiding battery fires or explosions

Observe the following precautions to prevent accidentally igniting the flammable gas that may be emitted from the battery:

● Make sure each jumper cable is connected to the correct terminal and that it is not unintentionally in contact with any other than the intended terminal.

● Do not allow the other end of the jumper cable connected to the "+" terminal to come into contact with any other parts or metal surfaces in the area, such as brackets or unpainted metal.

● Do not allow the + and - clamps of the jumper cables to come into contact with each other.

● Do not smoke, use matches, cigarette lighters or allow open flame near the battery.

■ Battery precautions

The battery contains poisonous and corrosive acidic electrolyte, while related parts contain lead and lead compounds. Observe the following precautions when handling the battery:

● When working with the battery, always wear safety glasses and take care not to allow any battery fluids (acid) to come into contact with skin, clothing or the vehicle body.

● Do not lean over the battery.

WARNING

- In the event that battery fluid comes into contact with the skin or eyes, immediately wash the affected area with water and seek medical attention. Place a wet sponge or cloth over the affected area until medical attention can be received.
- Always wash your hands after handling the battery support, terminals, and other battery-related parts.
- Do not allow children near the battery.

■ After recharging the battery

Have the battery inspected at your Lexus dealer as soon as possible.
If the battery is deteriorating, continued use may cause the battery to emit a malodorous gas, which may be detrimental to the health of passengers.

■ When replacing the battery

- When the vent plug and indicator are close to the hold down clamp, the battery fluid (sulfuric acid) may leak.
- For information regarding battery replacement, contact your Lexus dealer.
- After replacing, securely attach the exhaust hose and exhaust hole plug to the exhaust hole of the replaced battery. If not properly installed, gases (hydrogen) may leak into the vehicle interior, and there is the possible danger of the gas igniting and exploding.

NOTICE

■ When handling jumper cables

When connecting the jumper cables, ensure that they do not become entangled in the cooling fan or engine drive belt.

■ When connecting jumper cables

Make sure to connect jumper cables to the specified terminals and connecting point. Failure to do so may adversely affect the electronic devices or damage to them.

■ To prevent damaging the vehicle

The exclusive jump starting terminal is to be used when charging the battery from another vehicle in an emergency. It cannot be used to jump start another vehicle.

If your vehicle overheats

The following may indicate that your vehicle is overheating.

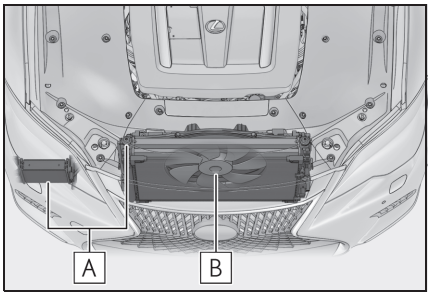
- The engine coolant temperature gauge (→P.70) is in the red zone or a loss of engine power is experienced. (For example, the vehicle speed does not increase.)
- "Engine Coolant Temp High Stop in a Safe Place See Owner's Manual" is shown on the multi-information display.
- Steam comes out from under the hood.

Correction procedures

1 Stop the vehicle in a safe place and turn off the air conditioning system, and then stop the engine.

2 If you see steam:
Carefully lift the hood after the steam subsides.
If you do not see steam:
Carefully lift the hood.

3 After the engine has cooled down sufficiently, inspect the hoses and radiator core (radiator) for any leaks.



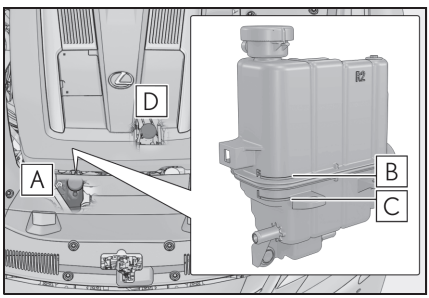
A Radiators

B Cooling fan

If a large amount of coolant leaks, immediately contact your Lexus dealer.

4 The coolant level is satisfactory if it is between the "F" and "L" lines on the reservoir.

▶ Engine



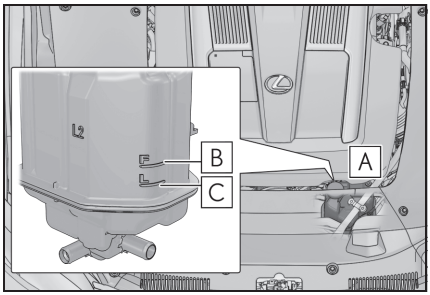
A Reservoir

B "F" line

C "L" line

D Coolant inlet cap

▶ Intercooler



A Reservoir

B "F" line

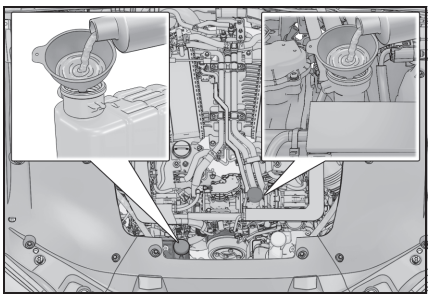
C "L" line

5 Add coolant if necessary.

Water can be used in an emergency if coolant is unavailable.

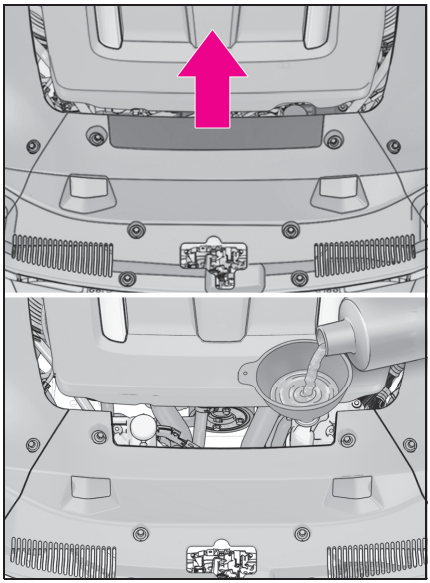
▶ Engine

→P.485



▶ Intercooler

Remove the engine compartment cover and add coolant.



6 Start the engine and turn the air conditioning system on to check that the radiator cooling fan operates and to check for coolant leaks from the radiator or hoses.

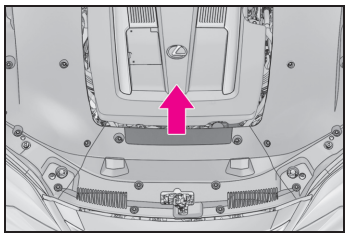
The fan operates when the air conditioning system is turned on immediately after a cold start. Confirm that the fan is operating by checking the fan sound and air flow. If it is difficult to check these, turn the air conditioning system on and off repeatedly. (The fan may not operate in freezing temperatures.)

7 If the fan is not operating:
Stop the engine immediately and contact your Lexus dealer.
If the fan is operating:
Have the vehicle inspected at the nearest Lexus dealer.

When adding engine coolant

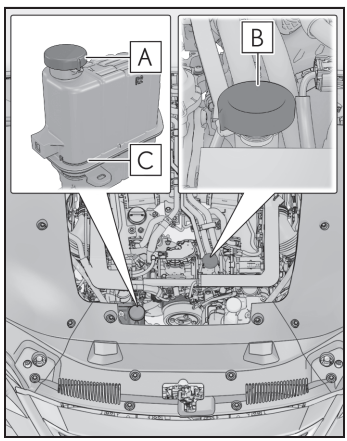
Add coolant in accordance with the following procedure.

1 Remove the engine compartment cover.



2 Remove the engine cover. (→P.410)

3 Remove the caps A and B.



4 Add coolant through the inlet of the cap A up to the "F" line C, and then replace the cap A.

5 Add coolant through the inlet of the cap B until it is full, and then replace the cap B.

6 Install the engine compartment cover and engine cover. (→P.411)

WARNING

■ When inspecting under the hood of your vehicle

Observe the following precautions. Failure to do so may result in serious injury such as burns.

- If steam is seen coming from under the hood, do not open the hood until the steam has subsided. The engine compartment may be very hot.
- Keep hands and clothing (especially a tie, a scarf or a muffler) away from the fan and belts.
  Failure to do so may cause the hands or clothing to be caught, resulting in serious injury.
- Do not loosen the coolant inlet cap, the engine coolant reservoir cap or the intercooler coolant reservoir cap while the engine and radiator are hot.
  High temperature steam or coolant could spray out.

NOTICE

■ When adding engine coolant

Add coolant slowly after the engine has cooled down sufficiently. Adding cool coolant to a hot engine too quickly can cause damage to the engine.

■ To prevent damage to the cooling system

Observe the following precautions:

- Avoid contaminating the coolant with foreign matter (such as sand or dust etc.).
- Do not use any coolant additive.

If the vehicle becomes stuck

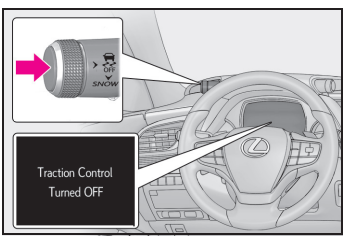
Carry out the following procedures if the tires spin or the vehicle becomes stuck in mud, dirt or snow:

Recovering procedure

1. Stop the engine. Set the parking brake and shift the shift position to P.
2. Remove the mud, snow or sand from around the rear wheels.
3. Place wood, stones or some other material under the rear wheels to help provide traction.
4. Restart the engine.
5. Shift the shift position to D or R and release the parking brake. Then, while exercising caution, depress the accelerator pedal.

■ When it is difficult to free the vehicle

Press the > OFF switch to turn off TRAC.



WARNING

■ When attempting to free a stuck vehicle

If you choose to push the vehicle back and forth to free it, make sure the surrounding area is clear to avoid striking other vehicles, objects or people. The vehicle may also lunge forward or lunge back suddenly as it becomes free. Use extreme caution.

■ When shifting the shift position

Be careful not to shift the shift position with the accelerator pedal depressed. This may lead to unexpected rapid acceleration of the vehicle that may cause an accident resulting in death or serious injury.

NOTICE

■ To avoid damaging the transmission and other components

- Avoid spinning the rear wheels and depressing the accelerator pedal more than necessary.
- If the vehicle remains stuck even after these procedures are performed, the vehicle may require towing to be freed.

8-1. Specifications

Maintenance data (fuel, oil level, etc.) 490

Fuel information 499

Tire information 501

8-2. Customization

Customizable features 510

8-3. Initialization

Items to initialize 524

Maintenance data (fuel, oil level, etc.)

Dimensions and weight

Overall length			206.1 in. (5235 mm)
Overall width			74.8 in. (1900 mm)
Overall height*1		2WD models	57.5 in. (1460 mm)*2 57.1 in. (1450 mm)*3
		AWD models	57.9 in. (1470 mm)*2 57.5 in. (1460 mm)*3
Wheelbase			123.0 in. (3125 mm)
Tread*1	Front	2WD models	64.2 in. (1630 mm)
		AWD models	64.2 in. (1630 mm)*2 64.4 in. (1635 mm)*3
	Rear		64.4 in. (1635 mm)*4 63.6 in. (1615 mm)*5
Vehicle capacity weight (Occupants + luggage)			870 lb. (395 kg)

*1: Unladen vehicles

*2: Without electronically modulated air suspension

*3: With electronically modulated air suspension

*4: Except F SPORT models

*5: F SPORT models

Seating capacity

Seating capacity	5 (Front 2, Rear 3)

Vehicle identification

Vehicle identification number

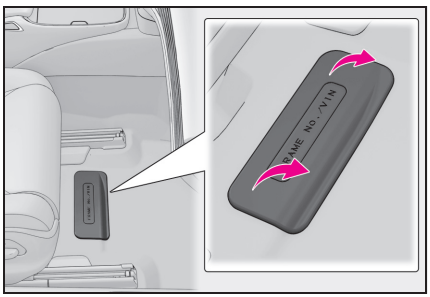
The vehicle identification number (VIN) is the legal identifier for your vehicle. This is the primary identification number for your Lexus. It is used in registering the ownership of your vehicle.

This number is stamped on the top left

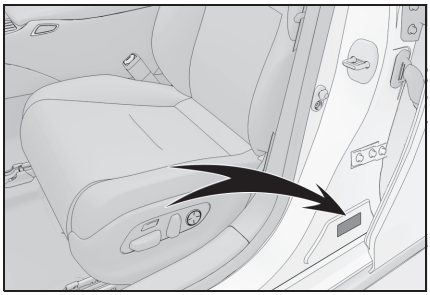
of the instrument panel.



This number is also stamped under the right-hand front seat.

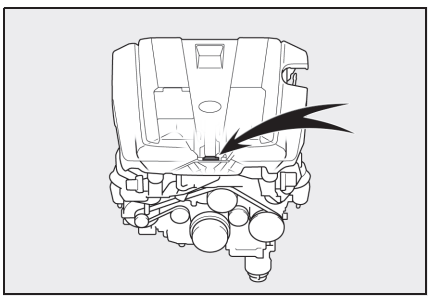


This number is also on the Certification Label.



■ Engine number

The engine number is stamped on the engine block as shown.



Engine

Model	3.5 L 6-cylinder (V35A-FTS) engine
Type	6-cylinder V type, 4-cycle, gasoline (with turbocharger)
Bore and stroke	3.37 × 3.94 in. (85.5 × 100.0 mm)
Displacement	210.2 cu. in. (3445 cm^3)
Valve clearance	Automatic adjustment
Drive belt tension	Automatic adjustment

Fuel

Fuel type	Unleaded gasoline only

Octane Rating	91 (Research Octane Number 96) or higher
Fuel tank capacity (Reference)	21.7 gal. (82.0 L, 18.0 Imp. gal.)

Lubrication system

Oil capacity (Drain and refill [Reference*])

With filter	▶ 2WD models 6.7 qt. (6.3 L, 5.5 Imp. qt.) ▶ AWD models 7.5 qt. (7.1 L, 6.2 Imp. qt.)
Without filter	▶ 2WD models 6.1 qt. (5.8 L, 5.1 Imp. qt.) ▶ AWD models 7.0 qt. (6.6 L, 5.8 Imp. qt.)

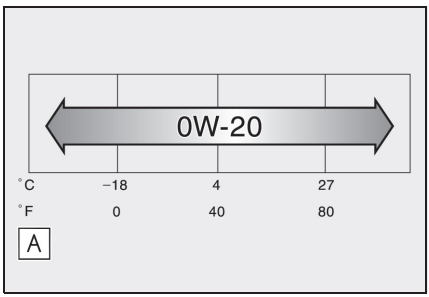
*: The engine oil capacity is a reference quantity to be used when changing the engine oil. When actually adding the engine oil, make sure that the oil level is between the low level mark and refill upper limit mark (→P.413). Warm up and turn off the engine, wait about 5 minutes, and check the oil level on the dipstick.

Engine oil selection

"Toyota Genuine Motor Oil" is used in your Lexus vehicle. Use Lexus approved "Toyota Genuine Motor Oil" or equivalent to satisfy the following grade and viscosity.

Oil grade: ILSAC GF-6A multigrade engine oil

Recommended viscosity: SAE 0W-20



A Outside temperature

SAE 0W-20 is the best choice for good fuel economy and good starting in cold weather.

If SAE 0W-20 is not available, SAE 5W-20 oil may be used. However, it must be replaced with SAE 0W-20 at the next oil change.

Oil viscosity (0W-20 is explained here as an example):

- The 0W in 0W-20 indicates the characteristic of the oil which allows cold startability. Oils with a lower value before the W allow for easier starting of the engine in cold weather.
- The 20 in 0W-20 indicates the viscosity characteristic of the oil when the oil is at high temperature. An oil with a higher viscosity (one with a higher value) may be better suited if the vehicle is operated at high speeds, or under extreme load conditions.

How to read oil container label:

The International Lubricant Specification Advisory Committee (ILSAC) Certification Mark is added to some oil containers to help you select the oil you should use.



Cooling system

Capacity (Reference)	▶ Engine 2WD models: 11.2 qt. (10.6 L, 9.3 Imp. qt.) AWD models: 11.1 qt. (10.5 L, 9.2 Imp. qt.) ▶ Intercooler 4.5 qt. (4.3 L, 3.8 Imp. qt.)
Coolant type	Use either of the following: • "Toyota Super Long Life Coolant" • Similar high-quality ethylene glycol-based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology Do not use plain water alone.

Ignition system (spark plug)

Make	DENSO EC22HPR-D7
Gap	0.028 in. (0.7 mm)

NOTICE

■ Iridium-tipped spark plugs

Use only iridium-tipped spark plugs. Do not adjust the spark plug gap.

Electrical system (battery)

Open voltage at 68°F (20°C):	12.3 V or higher (Turn the engine switch off and turn on the headlights for 20 to 30 seconds.)
Charging rates Slow charge	 5 A max.

Automatic transmission

Fluid capacity*	9.5 qt. (9.0 L, 7.9 Imp. qt.)
Fluid type	Toyota Genuine ATF WS

*: The fluid capacity is a reference quantity.
If replacement is necessary, contact your Lexus dealer.

NOTICE

■ Transmission fluid type

Using transmission fluid other than the above type may cause abnormal noise or vibration, or damage the transmission of your vehicle.

Transfer (AWD models)

Oil capacity	0.74 qt. (0.70 L, 0.62 Imp. qt.)
Oil type and viscosity*	Toyota Genuine Transfer gear oil LL 80 or equivalent

*: Your Lexus vehicle is filled with Toyota genuine gear oil at the factory. Use Lexus approved Toyota genuine gear oil or an equivalent of matching quality to satisfy the above specification. Please contact your Lexus dealer for further details.

Front differential (AWD models)

Oil capacity	0.69 qt. (0.65 L, 0.57 Imp. qt.)
Oil type and viscosity*	Toyota Genuine Differential gear oil LT 75W-85 GL-5 or equivalent

*: Your Lexus vehicle is filled with "Toyota Genuine Differential Gear Oil" at the factory. Use Lexus approved "Toyota Genuine Differential Gear Oil" or an equivalent oil of matching quality to satisfy the above specification. Please contact your Lexus dealer for further details.

Rear differential

▶ 2WD models

Oil capacity	0.90 qt. (0.85 L, 0.75 Imp. qt.)
Oil type and viscosity*	Toyota Genuine Differential gear oil LT 75W-85 GL-5 or equivalent

▶ AWD models

Oil capacity	1.42 qt. (1.35 L, 1.19 Imp. qt.)
Oil type and viscosity*	Toyota Genuine Differential gear oil LT 75W-85 GL-5 or equivalent

*: Your Lexus vehicle is filled with "Toyota Genuine Differential Gear Oil" at the factory. Use Lexus approved "Toyota Genuine Differential Gear Oil" or an equivalent oil of matching quality to satisfy the above specification. Please contact your Lexus dealer for further details.

Brakes

Pedal clearance*1	4.8 in. (121 mm) Min.
Pedal free play	0.04 — 0.24 in. (1 — 6 mm)
Brake pad wear limit	0.04 in. (1 mm)
Parking brake lining wear limit	0.04 in. (1 mm)
Parking brake indicator*2	When pushing the parking brake switch for 1 to 2 seconds: comes on When pulling the parking brake switch for 1 to 2 seconds: turns off
Fluid type	FMVSS No.116 DOT 3 or SAE J1703 FMVSS No.116 DOT 4 or SAE J1704

*1: Minimum pedal clearance when depressed with a force of 112 lbf (500 N, 51 kgf) while the engine is running.
When performing the brake pedal inspection, also be sure to check that the brake system warning light is not illuminated when the engine is running. (If the brake system warning light is illuminated, refer to P.457.)

*2: Make sure to confirm that the brake warning light (yellow) does not illuminate. (If the brake warning light illuminates, refer to P.457.)

Steering

Free play	Less than 1.2 in. (30 mm)

Tires and wheels

▶ 19-inch tires

Tire size	245/50RF19 101V
Tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions Front: 36 psi (250 kPa, 2.5 kgf/cm^2 or bar) Rear: 36 psi (250 kPa, 2.5 kgf/cm^2 or bar) Driving at high speeds above 100 mph (160 km/h) (in countries where such speeds are permitted by law) Add 9 psi (60 kPa, 0.6 kgf/cm^2 or bar) to the front tires and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Wheel size	19 × 8J
Wheel bolt torque	103 ft•lbf (140 N•m, 14.3 kgf•m)

▶ 20-inch tires (type A)

Tire size	245/45R20 99Y
Tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions Front: 35 psi (240 kPa, 2.4 kgf/cm^2 or bar) Rear: 35 psi (240 kPa, 2.4 kgf/cm^2 or bar) Driving at high speeds above 137 mph (220 km/h) (in countries where such speeds are permitted by law) Add 9 psi (60 kPa, 0.6 kgf/cm^2 or bar) to the front tires and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Wheel size	20 × 8 1/2J
Wheel bolt torque	103 ft•lbf (140 N•m, 14.3 kgf•m)

▶ 20-inch tires (type B)

Tire size	Front tires: 245/45RF20 99Y Rear tires: 275/40RF20 102Y
Tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions Front: 36 psi (250 kPa, 2.5 kgf/cm^2 or bar) Rear: 36 psi (250 kPa, 2.5 kgf/cm^2 or bar) Driving at high speeds above 137 mph (220 km/h) (in countries where such speeds are permitted by law) Add 9 psi (60 kPa, 0.6 kgf/cm^2 or bar) to the front tires and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Wheel size	Front wheels: 20 × 8 1/2J Rear wheels: 20 × 9 1/2J
Wheel bolt torque	103 ft•lbf (140 N•m, 14.3 kgf•m)

▶ 20-inch tires (type C)

Tire size	245/45R20 99V
Tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions Front: 35 psi (240 kPa, 2.4 kgf/cm^2 or bar) Rear: 35 psi (240 kPa, 2.4 kgf/cm^2 or bar) Driving at high speeds above 100 mph (160 km/h) (in countries where such speeds are permitted by law) Add 9 psi (60 kPa, 0.6 kgf/cm^2 or bar) to the front tires and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Wheel size	20 × 8 1/2J
Wheel bolt torque	103 ft•lbf (140 N•m, 14.3 kgf•m)

▶ 20-inch tires (type D)

Tire size	Front tires: 245/45R20 99V Rear tires: 275/40R20 102V
Tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions Front: 36 psi (250 kPa, 2.5 kgf/cm^2 or bar) Rear: 36 psi (250 kPa, 2.5 kgf/cm^2 or bar) Driving at high speeds above 100 mph (160 km/h) (in countries where such speeds are permitted by law) Add 9 psi (60 kPa, 0.6 kgf/cm^2 or bar) to the front tires and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Wheel size	Front wheels: 20 × 8 1/2J Rear wheels: 20 × 9 1/2J
Wheel bolt torque	103 ft•lbf (140 N•m, 14.3 kgf•m)

Fuel information

You must only use unleaded gasoline.
Select premium unleaded gasoline with an octane rating of 91 (Research Octane Number 96) or higher required for optimum engine performance and fuel economy.
If the octane rating is less than 91, damage to the engine may occur and may void the vehicle warranty.

At minimum, the gasoline you use should meet the specifications of ASTM D4814 in the U.S.A..

Gasoline quality

In very few cases, driveability problems may be caused by the brand of gasoline you are using. If driveability problems persist, try changing the brand of gasoline. If this does not correct the problem, consult your Lexus dealer.

Recommendation of the use of gasoline containing detergent additives

- Lexus recommends the use of gasoline that contains detergent additives to avoid the build-up of engine deposits.
- All gasoline sold in the U.S.A. contains minimum detergent additives to clean and/or keep clean intake systems, per EPA's lowest additives concentration program.
- Lexus strongly recommends the use of Top Tier Detergent Gasoline. For more information on Top Tier Detergent Gasoline and a list of marketers, please go to the official website www.toptiergas.com.

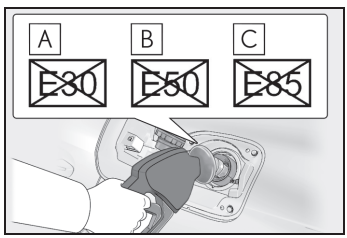
Recommendation of the use of low emissions gasoline

Gasolines containing oxygenates such as ethers and ethanol, as well as reformulated gasolines, are available in some cities. These fuels are typically acceptable for use, providing they meet other fuel requirements.

Lexus recommends these fuels, since the formulations allow for reduced vehicle emissions.

Non-recommendation of the use of blended gasoline

- Use only gasoline containing up to 15% ethanol.
  DO NOT use any flex-fuel or gasoline that could contain more than 15% ethanol, including from any pump labeled E30 (30% ethanol [A]), E50 (50% ethanol [B]), E85 (85% ethanol [C]) (which are only some examples of fuel containing more than 15% ethanol).



- If you use gasohol in your vehicle, be sure that it has an octane rating no lower than 91.
- Lexus does not recommend the use of gasoline containing methanol.

Non-recommendation of the use of gasoline containing MMT

Some gasoline contains an octane enhancing additive called MMT (Methylcyclopentadienyl Manganese Tricarbonyl).

Lexus does not recommend the use of gasoline that contains MMT. If fuel containing MMT is used, your emission control system may be adversely affected.

The malfunction indicator lamp on the instrument cluster may come on. If this happens, contact your Lexus dealer for service.

If your engine knocks

- Consult your Lexus dealer.
- You may occasionally notice light knocking for a short time while accelerating or

driving uphill. This is normal and there is no need for concern.

NOTICE

■ Notice on fuel quality

- Do not use improper fuels. If improper fuels are used, the engine will be damaged.
- Do not use leaded gasoline.
  Leaded gasoline can cause damage to your vehicle's three-way catalytic converters causing the emission control system to malfunction.
- Do not use gasohol other than the type previously stated.
  Other gasohol may cause fuel system damage or vehicle performance problems.
- Using unleaded gasoline with an octane number or rating lower than the level previously stated may cause persistent heavy knocking.
  At worst, this may lead to engine damage and will void the vehicle warranty.

■ When refueling with gasohol

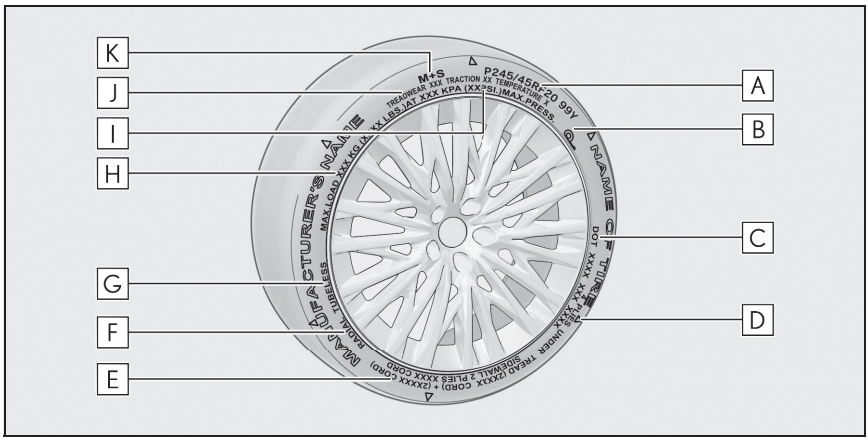
Take care not to spill gasohol. It can damage your vehicle's paint.

■ Fuel-related poor driveability

If poor driveability (poor hot starting, vaporization, engine knocking, etc.) is encountered after using a different type of fuel, discontinue the use of that type of fuel.

Tire information

Typical tire symbols



A Tire size (→P.502)

B Run-flat tire (RFT) (→P.472)

This vehicle is equipped with run-flat tires (RFT). A or mark is molded on the sidewall of the run-flat tire.

C DOT and Tire Identification Number (TIN) (→P.502)

D Location of treadwear indicators (→P.419)

E Tire ply composition and materials

Plies are layers of rubber-coated parallel cords. Cords are the strands which form the plies in a tire.

F Radial tires or bias-ply tires

A radial tire has "RADIAL" on the sidewall. A tire not marked "RADIAL" is a bias-ply tire.

G TUBELESS or TUBE TYPE

A tubeless tire does not have a tube and air is directly put into the tire. A tube type tire has a tube inside the tire and the tube maintains the air pressure.

H Load limit at maximum cold tire inflation pressure (→P.420)

I Maximum cold tire inflation pressure (→P.496)

This means the pressure to which a tire may be inflated.

J Uniform tire quality grading

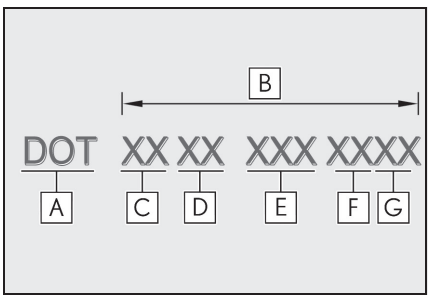
For details, see "Uniform Tire Quality Grading" that follows.

K Summer tires or all season tires (→P.420)

An all season tire has "M+S" on the sidewall. A tire not marked "M+S" is a summer tire.

Typical DOT and Tire Identification Number (TIN)

▶ Type A



A DOT symbol*

B Tire Identification Number (TIN)

C Tire manufacturer's identification mark

D Tire size code

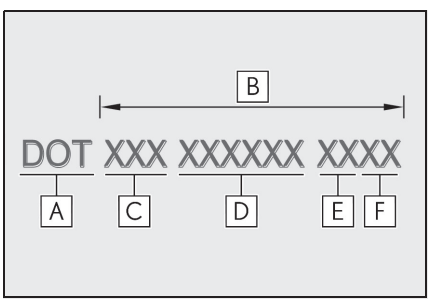
E Manufacturer's optional tire type code (3 or 4 letters)

F Manufacturing week

G Manufacturing year

*: The DOT symbol certifies that the tire conforms to applicable Federal Motor Vehicle Safety Standards.

▶ Type B



A DOT symbol*

B Tire Identification Number (TIN)

C Tire manufacturer's identification mark

D Manufacturer's code

E Manufacturing week

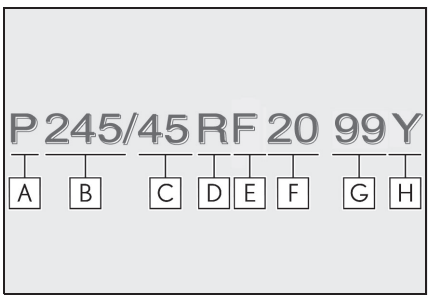
F Manufacturing year

*: The DOT symbol certifies that the tire conforms to applicable Federal Motor Vehicle Safety Standards.

Tire size

■ Typical tire size information

The illustration indicates typical tire size.



A Tire use (P = Passenger car, T = Temporary use)

B Section width (millimeters)

C Aspect ratio (tire height to section width)

D Tire construction code (R = Radial, D = Diagonal)

E Run-flat tire code

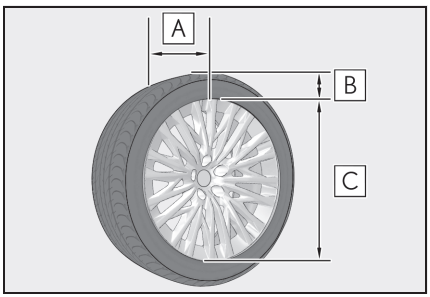
F Wheel diameter (inches)

G Load index (2 digits or 3 digits)

H Speed symbol (alphabet with one

letter)

■ Tire dimensions

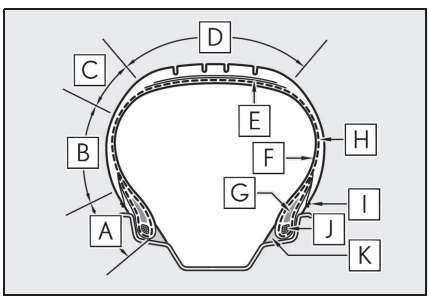


A Section width

B Tire height

C Wheel diameter

Tire section names



A Bead

B Sidewall

C Shoulder

D Tread

E Belt

F Inner liner

G Reinforcing rubber

H Carcass

I Rim lines

J Bead wires

K Chafer

Uniform Tire Quality Grading

This information has been prepared in accordance with regulations issued by the National Highway Traffic Safety Administration of the U.S. Department of Transportation.

It provides the purchasers and/or prospective purchasers of Lexus vehicles with information on uniform tire quality grading.

Your Lexus dealer will help answer any questions you may have as you read this information.

■ DOT quality grades

All passenger vehicle tires must conform to Federal Safety Requirements in addition to these grades. Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width.

For example: Treadwear 200 Traction AA Temperature A

■ Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course.

For example, a tire graded 150 would wear one and a half (1 - 1/2) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use. Performance may differ significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

■ Traction AA, A, B, C

The traction grades, from highest to lowest, are AA, A, B and C, and they represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete.

A tire marked C may have poor traction performance.

Warning: The traction grade assigned to this tire is based on braking (straight ahead) traction tests and does not include cornering (turning) traction.

■ Temperature A, B, C

The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure.

Grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109.

Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

Warning: The temperature grades of a tire assume that it is properly inflated and not overloaded.

Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

Glossary of tire terminology

Tire related term	Meaning
Cold tire inflation pressure	Tire pressure when the vehicle has been parked for three hours or more, or has not been driven more than 1 mile or 1.5 km under that condition
Maximum inflation pressure	The maximum cold inflated pressure to which a tire may be inflated, shown on the sidewall of the tire
Recommended inflation pressure	Cold tire inflation pressure recommended by a manufacturer
Accessory weight	The combined weight (in excess of those standard items which may be replaced) of automatic transmission, power steering, power brakes, power windows, power seats, radio and heater, to the extent that these items are available as factory-installed equipment (whether installed or not)

Tire related term	Meaning
Curb weight	The weight of a motor vehicle with standard equipment, including the maximum capacity of fuel, oil and coolant, and if so equipped, air conditioning and additional weight optional engine
Maximum loaded vehicle weight	The sum of: (a) Curb weight (b) Accessory weight (c) Vehicle capacity weight (d) Production options weight
Normal occupant weight	150 lb. (68 kg) times the number of occupants specified in the second column of Table 1* that follows
Occupant distribution	Distribution of occupants in a vehicle as specified in the third column of Table 1* below
Production options weight	The combined weight of installed regular production options weighing over 5 lb. (2.3 kg) in excess of the standard items which they replace, not previously considered in curb weight or accessory weight, including heavy duty brakes, ride levelers, roof rack, heavy duty battery, and special trim
Rim	A metal support for a tire or a tire and tube assembly upon which the tire beads are seated
Rim diameter (Wheel diameter)	Nominal diameter of the bead seat
Rim size designation	Rim diameter and width
Rim type designation	The industry manufacturer's designation for a rim by style or code
Rim width	Nominal distance between rim flanges
Vehicle capacity weight (Total load capacity)	The rated cargo and luggage load plus 150 lb. (68 kg) times the vehicle's designated seating capacity
Vehicle maximum load on the tire	The load on an individual tire that is determined by distributing to each axle its share of the maximum loaded vehicle weight, and dividing by two

Tire related term	Meaning
Vehicle normal load on the tire	The load on an individual tire that is determined by distributing to each axle its share of curb weight, accessory weight, and normal occupant weight (distributed in accordance with Table 1* below), and dividing by two
Weather side	The surface area of the rim not covered by the inflated tire
Bead	The part of the tire that is made of steel wires, wrapped or reinforced by ply cords and that is shaped to fit the rim
Bead separation	A breakdown of the bond between components in the bead
Bias ply tire	A pneumatic tire in which the ply cords that extend to the beads are laid at alternate angles substantially less than 90 degrees to the centerline of the tread
Carcass	The tire structure, except tread and sidewall rubber which, when inflated, bears the load
Chunking	The breaking away of pieces of the tread or sidewall
Cord	The strands forming the plies in the tire
Cord separation	The parting of cords from adjacent rubber compounds
Cracking	Any parting within the tread, sidewall, or innerliner of the tire extending to cord material
CT	A pneumatic tire with an inverted flange tire and rim system in which the rim is designed with rim flanges pointed radially inward and the tire is designed to fit on the underside of the rim in a manner that encloses the rim flanges inside the air cavity of the tire
Extra load tire	A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire
Groove	The space between two adjacent tread ribs
Innerliner	The layer(s) forming the inside surface of a tubeless tire that contains the inflating medium within the tire

Tire related term	Meaning
Innerliner separation	The parting of the innerliner from cord material in the carcass
Intended outboard sidewall	(a) The sidewall that contains a whitewall, bears white lettering, or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same molding on the other sidewall of the tire, or (b) The outward facing sidewall of an asymmetrical tire that has a particular side that must always face outward when mounted on a vehicle
Light truck (LT) tire	A tire designated by its manufacturer as primarily intended for use on lightweight trucks or multipurpose passenger vehicles
Load rating	The maximum load that a tire is rated to carry for a given inflation pressure
Maximum load rating	The load rating for a tire at the maximum permissible inflation pressure for that tire
Maximum permissible inflation pressure	The maximum cold inflation pressure to which a tire may be inflated
Measuring rim	The rim on which a tire is fitted for physical dimension requirements
Open splice	Any parting at any junction of tread, sidewall, or innerliner that extends to cord material
Outer diameter	The overall diameter of an inflated new tire
Overall width	The linear distance between the exteriors of the sidewalls of an inflated tire, including elevations due to labeling, decorations, or protective bands or ribs
Passenger car tire	A tire intended for use on passenger cars, multipurpose passenger vehicles, and trucks, that have a gross vehicle weight rating (GVWR) of 10,000 lb. or less.
Ply	A layer of rubber-coated parallel cords
Ply separation	A parting of rubber compound between adjacent plies

Tire related term	Meaning
Pneumatic tire	A mechanical device made of rubber, chemicals, fabric and steel or other materials, that, when mounted on an automotive wheel, provides the traction and contains the gas or fluid that sustains the load
Radial ply tire	A pneumatic tire in which the ply cords that extend to the beads are laid at substantially 90 degrees to the centerline of the tread
Reinforced tire	A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire
Section width	The linear distance between the exteriors of the sidewalls of an inflated tire, excluding elevations due to labeling, decoration, or protective bands
Sidewall	That portion of a tire between the tread and bead
Sidewall separation	The parting of the rubber compound from the cord material in the sidewall
Snow tire	A tire that attains a traction index equal to or greater than 110, compared to the ASTM E-1136 Standard Reference Test Tire, when using the snow traction test as described in ASTM F-1805-00, Standard Test Method for Single Wheel Driving Traction in a Straight Line on Snow-and Ice-Covered Surfaces, and which is marked with an Alpine Symbol () on at least one sidewall
Test rim	The rim on which a tire is fitted for testing, and may be any rim listed as appropriate for use with that tire
Tread	That portion of a tire that comes into contact with the road
Tread rib	A tread section running circumferentially around a tire
Tread separation	Pulling away of the tread from the tire carcass

Tire related term	Meaning
Treadwear indicators (TWI)	The projections within the principal grooves designed to give a visual indication of the degrees of wear of the tread
Wheel-holding fixture	The fixture used to hold the wheel and tire assembly securely during testing

*: Table 1 -Occupant loading and distribution for vehicle normal load for various designated seating capacities

Designated seating capacity, Number of occupants	Vehicle normal load, Number of occupants	Occupant distribution in a normally loaded vehicle
2 through 4	2	2 in front
5 through 10	3	2 in front, 1 in second seat
11 through 15	5	2 in front, 1 in second seat, 1 in third seat, 1 in fourth seat
16 through 20	7	2 in front, 2 in second seat, 2 in third seat, 1 in fourth seat

Customizable features

Your vehicle includes a variety of electronic features that can be personalized to suit your preferences. The settings of these features can be changed by using the center display or at your Lexus dealer.

Customizing vehicle features

■ To change setting with ⚙

1 Select ⚙ on the center display.

2 Select "Vehicle customize" or "Driving assist".

3 Select the item to change the settings of from the list.

For functions that can be turned on/off, select (ON) / (OFF).

For functions whose level can be adjusted, such as volume, sensor sensitivity, etc., slide the icon on the bar.

■ To change setting with 🚗

1 Select 🚗 on the center display.

2 Select "Driving assist".

3 Select the item to change the settings of from the list.

Each time the switch is selected, the setting will be enabled/disabled.

When enabling is selected, the item display will be emphasized.

■ During customization

Stop the vehicle in a safe place, apply the parking brake, and shift the shift position to P. Also, to prevent battery discharge, leave the engine operating while customizing the features.

⚠ WARNING

■ During customization

As the engine needs to be running during customization, ensure that the vehicle is parked in a place with adequate ventilation. In a closed area such as a garage, exhaust gases including harmful carbon monoxide (CO) may collect and enter the vehicle. This may lead to death or a serious health hazard.

NOTICE

■ During customization

To prevent battery discharge, ensure that the engine is running while customizing features.

Customizable Features

Some function settings are changed simultaneously with other functions being customized. Contact your Lexus dealer for further details.

A Settings that can be changed using the center display

B Settings that can be changed by your Lexus dealer

Definition of symbols: O = Available, – = Not available

■ **Seat belts (→P.26)**

Function	Default setting	Customized setting	A	B
Easy Access Buckle*	On	Off	–	○

*: If equipped

■ **Gauges, meters and multi-information display (→P.70, 77)**

The language, units of measure, etc. of some items displayed on the meter or multi-information display will be changed according to settings on the center display. Refer to "MULTIMEDIA OWNER'S MANUAL".

Function	Default setting	Customized setting	A	B
Meter display type	Type 1	Type 2	○	–
		Type 3		
Eco Driving Indicator Light	On	Off	○	–
Rev indicator*	5000 rpm	2000 - 6400 rpm	○	–
		Off		
Rev peak*	On	Off	○	–
Suggestion function	On	On (when the vehicle is stopped)	○	–
		Off		

*: F SPORT models

■ **Head-up Display* (→P.79)**

Function	Default setting	Customized setting	A	B
Head-up display	On	Off	○	–
Head-up display type	Standard	Full	○	–
		Minimal		
Head-up display brightness	Standard	Desired brightness	○	–
Head-up display position	Standard	Desired position	○	–
Head-up display angle adjustment	Standard	Desired angle	○	–

*: If equipped

■ Door lock (→P.96, 101)

Function	Default setting	Customized setting	A	B
Unlocking using a mechanical key	Driver's door unlocked in one step, all doors unlocked in two step	All doors unlocked in one step	–	○
Locking/unlocking of the trunk when all doors are locked/unlocked	On	Off	–	○
Automatic door locking function	Shift position linked door locking operation	Off	○	○
		Speed linked door locking operation		
Automatic door unlocking function	Shift position linked door unlocking operation	Off	○	○
		Driver's door linked door unlocking operation		

■ Trunk (→P.101)

Function	Default setting	Customized setting	A	B
Hands Free Power Trunk Lid (kick sensor)*	On	Off	○	–

*: If equipped

■ Smart access system with push-button start and wireless remote control (→P.96, 108)

Function	Default setting	Customized setting	A	B
Operation buzzer volume	5	Off	○	○
		1 to 7		
Operation signal (Emergency flashers)	On	Off	○	○
Time elapsed before automatic door lock function is activated if door is not opened after being unlocked	60 seconds	Off	○	○
		30 seconds		
		120 seconds		
Open door warning buzzer	On	Off	–	○

■ **Smart access system with push-button start (→P.96, 108)**

Function	Default setting	Customized setting	A	B
Smart access system with push-button start	On	Off	○	○
The doors that are unlocked using the smart access system with push-button start can be selected	Driver's door	All the doors	○	○
Number of consecutive door lock operations	2 times	As many as desired	–	○
Time elapsed before unlocking all the door when gripping and holding the driver's door handle	2 seconds	Off	–	○
		1.5 seconds		
		2.5 seconds		

■ **Wireless remote control (→P.92, 96, 101)**

Function	Default setting	Customized setting	A	B
Wireless remote control	On	Off	–	○
Unlocking operation	Driver's door unlocked in one step, all doors unlocked in two step	All doors unlocked in one step	○	○
Theft deterrent panic mode	On	Off	–	○
Trunk unlocking operation	Press and hold (short)	One short press	–	○
		Push twice		
		Press and hold (long)		
		Off		
Locking operation when door opened	On	Off	○	○

■ **Front seats (→P.113)**

Function	Default setting	Customized setting	A	B
Driver's seat position linked head restraint height operation*	Off	On	–	○

*: If equipped

■ Power rear seats* (→P.119)

Function	Default setting	Customized setting	A	B
Shift-linked rear seat reclining function	On	Off	–	O

*: If equipped

■ Driving position memory (→P.124)

Function	Default setting	Customized setting	A	B
Selecting doors linked to the memory recall function	Driver's door	All doors	–	O
Driver's seat movement when exiting the vehicle	Standard	Off	O	O
		Partial		
Driver's seat upward movement when exiting the vehicle	Off	Standard	O	O
		Partial		
Steering wheel movement	Tilt only	Telescopic only	O	–
		Tilt and telescopic		
		Off		

■ Outside rear view mirrors (→P.143)

Function	Default setting	Customized setting	A	B
Automatic mirror folding and extending operation	Linked to the locking/unlocking of the doors	Off	–	O
		Linked to operation of the engine switch		

■ Power windows, and moon roof* or panoramic moon roof* (→P.146, 149, 151)

Function	Default setting	Customized setting	A	B
Mechanical key linked operation	Off	On	–	O
Wireless remote control linked operation	Off	On (open only)	–	O
Wireless remote control linked operation signal (buzzer)	On	Off	–	O

*: If equipped

■ Moon roof* (→P.146, 149)

Function	Default setting	Customized setting	A	B
Linked operation of components when mechanical key is used (open only)	Slide only	Tilt only	–	○
Linked operation of components when wireless remote control is used (open only)	Slide only	Tilt only	–	○

*: If equipped

■ Automatic light control system (→P.185)

Function	Default setting	Customized setting	A	B
Light sensor sensitivity	Normal	Brighter	○	○
		Bright		
		Dark		
		Darker		
Time elapsed before headlights automatically turn off after doors are closed	30 seconds	Off	○	○
		60 seconds		
		90 seconds		
Windshield wiper linked headlight illumination	On	Off	–	○

■ Lights (→P.185)

Function	Default setting	Customized setting	A	B
Daytime running lights	On	Off*	○	–
Welcome lighting	On	Off	–	○

*: Except for Canada

■ Pre-Collision System (→P.208)

Function	Customized setting	A	B
Pre-Collision System	ON/OFF	○	–
Warning timing	Later/Default/Earlier	○	–

■ **Front Cross Traffic Alert*(→P.237)**

Function	Customized setting	A	B
Front Cross Traffic Alert	ON/OFF	○	–
Alert timing	Later/Default/Earlier	○	–

*: If equipped

■ **Lane Departure Alert system (→P.226)**

Function	Customized setting	A	B
Lane Departure Alert system	ON/OFF	○	–
Alert timing	Default/Earlier	○	–
Alert options	Vibration/Audible	○	–

■ **Lane Change Assist* (→P.223)**

Function	Customized setting	A	B
Lane Change Assist	ON/OFF	○	–

*: If equipped

■ **Dynamic Radar Cruise Control (→P.242)**

Function	Customized setting	A	B
Extended Resume Time*	ON/OFF	○	–
Acceleration setting	High/Mid/Low	○	–
Guide message	ON/OFF	○	–
Curve speed reduction	High/Mid/Low/OFF	○	–

*: Vehicles with Traffic Jam Assist

■ **Proactive Driving Assist (→P.232)**

Function	Customized setting	A	B
Proactive Driving Assist (PDA)	ON/OFF	○	–
Support sensitivity	Low/Mid/High	○	–
Steering Assist (SA)	ON/OFF	○	–

Function	Customized setting	A	B
Deceleration Assist (DA)	ON/OFF	○	–
Obstacle Anticipation Assist (OAA)	ON/OFF	○	–

■ **Road Sign Assist*** (→P.240)

Function	Customized setting	A	B
Road Sign Assist	ON/OFF	○	–
Excess speed notification method	None/Visual/Visual and Audible	○	–
Other notifications method	None/Visual/Visual and Audible	○	–
Excess speed notification level	5 mph (10 km/h) / 3 mph (5 km/h) / 1 mph (2 km/h)	○	–

*: If equipped

■ **Driver break suggestion** (→P.227)

Function	Customized setting	A	B
Driver break suggestion	ON/OFF	○	–

■ **Traffic Jam Assist*** (→P.258)

Function	Customized setting	A	B
Traffic Jam Assist	ON/OFF	○	–
Driver Monitor Camera Recording	ON/OFF	○	–

*: If equipped

■ **Driver monitor*** (→P.204)

Function	Customized setting	A	B
Warning function	ON/OFF	○	–

*: If equipped

■ BSM (Blind Spot Monitor) (→P.264)

Function	Customized setting	A	B
BSM (Blind Spot Monitor)	On/Off	○	–
Outside rear view mirror indicator brightness	Dim/Bright	○	–
Alert timing for presence of approaching vehicle (sensitivity)	Later/Default/Earlier	○	–
Buzzer warning	On/Off	○	–

■ Intuitive parking assist*1 (→P.272)

Function	Customized setting	A	B
Intuitive parking assist	On/Off	○	–
Buzzer volume of Intuitive parking assist when operating*2	Level 1/Level 2/Level 3	○	–

*1: If equipped

*2: The sound volume is linked among the intuitive parking assist, RCTA, and RCD.

■ RCTA (Rear cross traffic alert) function (→P.281)

Function	Customized setting	A	B
RCTA (Rear cross traffic alert) function	On/Off	○	–
Buzzer volume of RCTA when operating*	Level 1/Level 2/Level 3	○	–

*: The sound volume is linked among the intuitive parking assist, RCTA, and RCD.

■ RCD (Rear Camera Detection) function* (→P.286)

Function	Customized setting	A	B
RCD (Rear Camera Detection) function	ON/OFF	○	–

*: If equipped

■ PKSB (Parking Support Brake)* (→P.289)

Function	Customized setting	A	B
PKSB (Parking Support Brake) function	ON/OFF	○	–

*: If equipped

■ Lexus Teammate Advanced Park*1, 2(→P.301)

Function	Default setting	Customized setting	A	B
Vehicle speed during operation	Standard	Slow	○	–
		Fast		
Distance to objects	Standard	Far	○	–
Preferred parking method	Parallel	Perpendicular	○	–
Preferred parking direction	Forward	Reverse	○	–
Preferred exit direction (perpendicular)	Right	Left	○	–
Preferred exit direction (parallel)	Left	Right	○	–
Camera view when parking	Standard	Wide	○	–
Camera view when exiting	Wide	Standard	○	–
Parking path adjustment	0 (Centered)	-3 (Inward) to +3 (Outward)	○	–
Road width adjustment	Standard	Slightly narrow	○	–
		Narrow		
Park position adjustment (forward)	0 (Centered)	-3 (Rearward) to +3 (Frontward)	○	–
Park position adjustment (reverse)	0 (Centered)	-3 (Rearward) to +3 (Frontward)	○	–
Rear accessory setting	Off	3.9 in. (10 cm)	○	–
		7.9 in. (20 cm)		
		11.8 in. (30 cm)		
		15.7 in. (40 cm)		
Clear registered parking space	–	–	○	–

*1: This settings can be changed on the Advanced Park guidance screen. (→P.306)

*2: If equipped

■ **Safe Exit Assist (→P.268)**

Function	Customized setting	A	B
Safe Exit Assist	On/Off	○	–
Outside rear view mirrors display	On/Off	○	–
Detection sensitivity	Low/Mid/High	○	–

■ **Driving mode select switch (→P.325)**

Function	Default setting	Customized setting	A	B
Powertrain control in customized mode*	Normal	Power / Eco	○	–
Steering control in customized mode*	Normal	Sport	○	–
Suspension control in customized mode*	Normal	Sport / Comfort	○	–
Air conditioning operation in customized mode*	Normal	Eco	○	–

*: If equipped

■ **Electronically modulated air suspension* (→P.327)**

Function	Default setting	Customized setting	A	B
Vehicle height control	On	Off	○	–
Ingress/egress height control function	On	Off	○	–

*: If equipped

■ **Engine switch (→P.169)**

Function	Customized setting	A	B
ACCESSORY mode customization Enabling/Disabling ACCESSORY mode	On/Off	○	○

■ Rear seat reminder (→P.98)

Function	Default setting	Customized setting	A	B
Rear seat reminder function	On	Off	○	–

■ Automatic air conditioning system (→P.344)

Function	Default setting	Customized setting	A	B
A/C auto switch operation	On	Off	○	○
Exhaust gas sensor sensitivity	Standard	-3 to 3	○	○
		OFF		

■ Seat heaters/seat ventilators*1 (→P.355)

Function	Default setting	Customized setting	A	B
Driver's seat temperature preference in automatic mode	Standard	-2 (cooler) to 2 (warmer)	○	○
Passenger's seat temperature preference in automatic mode	Standard	-2 (cooler) to 2 (warmer)	○	○
Left-hand rear seat temperature preference in automatic mode*1	Standard	-2 (cooler) to 2 (warmer)	○	○
Right-hand rear seat temperature preference in automatic mode*1	Standard	-2 (cooler) to 2 (warmer)	○	○
Engine switch linked automatic activation of the left-hand rear seat heater*2	Off	On	○	○
Engine switch linked automatic activation of the right-hand rear seat heater*2	Off	On	○	○

*1: If equipped

*2: Vehicles without power rear seat

■ Heated steering wheel* (→P.355)

Function	Default setting	Customized setting	A	B
Steering wheel heating preference in automatic mode	Standard	-2 (low) to 2 (high)	O	O

*: If equipped

■ Illumination (→P.359)

Function	Default setting	Customized setting	A	B
Time elapsed before the interior lights turn off	15 seconds	Off	–	O
		7.5 seconds		
		30 seconds		
Operation of the interior lights after the engine switch is turned off	On	Off	–	O
Operation of the interior lights when you approach the vehicle with the electronic key on your person	On	Off	–	O
Operation of the interior lights when the doors are unlocked	On	Off	–	O
Footwell lights	On	Off	–	O
Time elapsed before the outer foot lights turn off	15 seconds	Off	–	O
		7.5 seconds		
		30 seconds		
Operation of the outer foot lights when you approach the vehicle with the electronic key on your person	On	Off	–	O
Operation of the outer foot lights when the doors are unlocked	On	Off	–	O
Operation of the outer foot lights when a door is opened	On	Off	–	O
Fading out of the outer foot lights when they turn off	Long	Short	–	O

■ **Vehicle customization**

- When the smart access system with push-button start is off, the entry unlock function cannot be customized.
- When the doors remain closed after unlocking the doors and the timer activated automatic door lock function activates, signals will be generated in accordance with the operation buzzer volume and operational signal (Emergency flashers) function settings.
- Some settings can be changed using a switch or the audio system screen. If a setting is changed using a switch, the changed setting will not be reflected on the audio system screen until the engine switch is turned off and then to IGNITION ON mode.

Items to initialize

The following items must be initialized for normal system operation after such cases as the battery being reconnected, or maintenance being performed on the vehicle:

List of items to initialize

Item	When to initialize	Reference
Message indicating maintenance is required	• After maintenance is performed	P.400
Oil maintenance	• After maintenance is performed	P.414
Tire pressure warning system	• When the specified tire inflation pressure has changed, such as due to carried load, etc. • When the tire inflation pressure is changed such as when the tire size is changed.	P.425

9-1. For owners

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Reporting safety defects for U.S. owners

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying the Lexus Division of Toyota Motor Sales, U.S.A., Inc. (Toll-free: 1-800-25-LEXUS).

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Lexus Division of Toyota Motor Sales, U.S.A., Inc.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to *http://www.safercar.gov*; or write to: Administrator, NHTSA, 1200 New Jersey Ave. SE., Washington, DC 20590. You can also obtain other information about motor vehicle safety from *http://www.safercar.gov*.

Reporting safety defects for Canadian owners

Canadian customers who wish to report a safety-related defect to Transport Canada, Defects Investigations and Recalls, may telephone the toll-free hotline 1-800-333-0510, mail Transport Canada - ASFAD, 330 Sparks Street, Ottawa, ON, K1A 0N5, or complete the online form at *https://www.tc.gc.ca/recalls.*

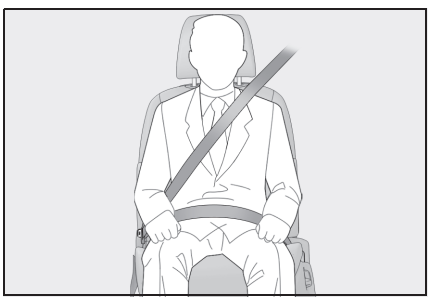
Seat belt instructions for Canadian owners (in French)

The following is a French explanation of seat belt instructions extracted from the seat belt section in this manual.

See the seat belt section for more detailed seat belt instructions in English.

Utilisation correcte des ceintures de sécurité

- Déroulez la sangle diagonale de telle sorte qu'elle passe bien sur l'épaule, sans pour autant être en contact avec le cou ou glisser de l'épaule.



- Placez la sangle abdominale le plus bas possible sur les hanches.
- Réglez la position du dossier de siège. Asseyez-vous le dos droit et calez-vous bien dans le siège.
- Ne vrillez pas la ceinture de sécurité.

Entretien et soin

■ **Traitement des ceintures de sécurité**

Nettoyez avec un chiffon ou une éponge humidifiés avec de l'eau savonneuse tiède. Vérifiez régulièrement que les ceintures ne sont pas usées, effilochées ou entaillées excessivement.

AVERTISSEMENT

■ **Détérioration et usure des ceintures de sécurité**

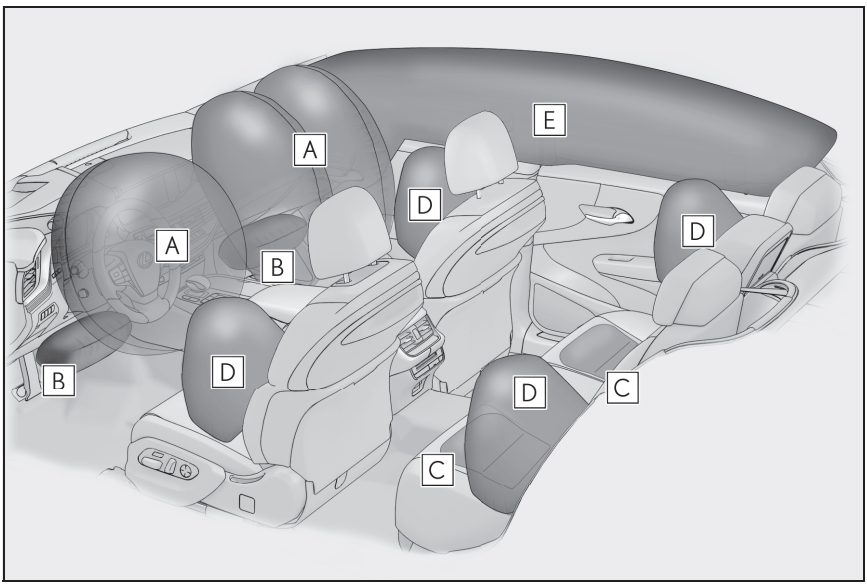
Inspectez le système de ceintures de sécurité régulièrement. Contrôlez l'absence de coupures, d'effilochages et de pièces desserrées. N'utilisez pas une ceinture de sécurité endommagée avant qu'elle ne soit remplacée. Une ceinture de sécurité endommagée ne permet pas de protéger un occupant de blessures graves ou mortelles.

SRS airbag instructions for Canadian owners (in French)

The following is a French explanation of SRS airbag instructions extracted from the SRS airbag section in this manual.

See the SRS airbag section for more detailed SRS airbag instructions in English.

Système de coussins gonflables SRS



A Coussin gonflable conducteur/coussin gonflable du passager avant SRS

Contribuent à réduire l'impact au niveau de la tête et du thorax du conducteur et du passager avant

B Coussin gonflable de genoux SRS

Permettent de réduire le choc pour le conducteur et le passager avant

C Coussins gonflables de coussin de siège SRS (sur modèles équipés)

- Aident à retenir les occupants des sièges arrière latéraux

D Coussins gonflables latéraux SRS

- Contribuent à réduire l'impact au niveau du thorax des occupants des sièges avant
- Contribuent à réduire l'impact au niveau du thorax des occupants des sièges arrière latéraux

E Coussins gonflables rideaux SRS

- Contribuent à réduire l'impact au niveau de la tête des occupants des sièges avant et des sièges arrière latéraux

• Peut contribuer à empêcher les occupants d'être éjectés du véhicule en cas de tonneau

Votre véhicule est équipé de COUSSINS GONFLABLES INTELLIGENTS conçus selon les normes de sécurité américaines applicables aux véhicules à moteur (FMVSS208). L'ensemble des capteurs de coussins gonflables (ECU) régule le déploiement des coussins gonflables sur la base des informations qu'il reçoit des capteurs, etc., indiqués ci-dessus dans le schéma illustrant les composants du système. Parmi ces informations figurent la gravité du choc et l'occupation du véhicule par les passagers. Le déploiement rapide des coussins gonflables est obtenu au moyen d'une réaction chimique dans les dispositifs pyrotechniques, qui produit un gaz inoffensif permettant d'amortir le mouvement des occupants.

⚠ AVERTISSEMENT

■ Précautions relatives aux coussins gonflables SRS

Respectez les précautions suivantes. Le non-respect de ces précautions peut occasionner des blessures graves, voire mortelles.

● Le conducteur et tous les passagers doivent porter correctement leur ceinture de sécurité.
Les coussins gonflables SRS sont des dispositifs supplémentaires à utiliser avec les ceintures de sécurité.

● Le coussin gonflable conducteur SRS se déploie avec une force considérable et peut occasionner des blessures graves, voire mortelles, tout particulièrement si le conducteur se trouve très près du coussin gonflable. L'autorité fédérale chargée de la sécurité routière aux États-Unis (NHTSA) conseille:

La zone à risque du coussin gonflable conducteur se situant dans les premiers 2 à 3 in. (50 à 75 mm) de déploiement, vous placer à 10 in. (250 mm) de votre coussin gonflable conducteur vous garantit une marge de sécurité suffisante. Cette distance est à mesurer entre le centre du volant et le sternum. Si votre position de conduite actuelle vous place à moins de 10 in. (250 mm) du coussin gonflable conducteur, vous pouvez changer votre position de conduite de plusieurs façons:

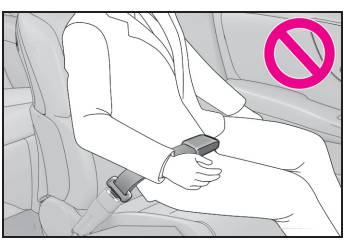
• Reculez votre siège le plus possible, de manière à pouvoir encore atteindre confortablement les pédales.

AVERTISSEMENT

- Inclinez légèrement le dossier de siège. Bien que les véhicules aient une conception différente, un grand nombre de conducteurs peuvent s'asseoir à une distance de 10 in. (251 mm), même avec le siège conducteur complètement avancé, simplement en inclinant un peu le dossier de siège. Si vous avez des difficultés à voir la route après avoir incliné le dossier de votre siège, utilisez un coussin ferme et antidérapant pour vous rehausser ou remontez le siège si votre véhicule est équipé de cette fonction.

- Si votre volant est réglable, inclinez-le vers le bas. Cela a pour effet d'orienter le coussin gonflable en direction de votre poitrine plutôt que de votre tête et de votre cou. Réglez votre siège selon les recommandations de la NHTSA, tout en conservant le contrôle du véhicule avec les pédales et le volant, et en préservant la vue des commandes du tableau de bord.

- Si vous attachez une rallonge de ceinture de sécurité à une boucle de ceinture de sécurité de siège avant sans l'attacher au pêne de la ceinture de sécurité, le système de coussins gonflables SRS détermine que l'occupant a attaché sa ceinture de sécurité, bien que la ceinture de sécurité ne soit pas bouclée. Dans ce cas, les coussins gonflables frontaux SRS peuvent ne pas se déployer correctement lors d'une collision, ce qui peut occasionner des blessures graves, voire mortelles. Veillez à porter la ceinture de sécurité correctement en cas d'utilisation d'une rallonge de ceinture de sécurité.

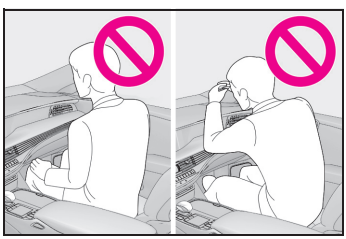


- Le coussin gonflable frontal SRS se déploie avec une force considérable et peut occasionner des blessures graves, voire mortelles, tout particulièrement si le passager avant se trouve très près du coussin gonflable. Le siège du passager avant doit être éloigné le plus possible du coussin gonflable, avec le dossier réglé de façon à ce que le passager avant soit assis bien droit dans le siège.

- Les nourrissons et les enfants qui ne sont pas correctement assis et/ou attachés peuvent être grièvement blessés ou tués par le déploiement d'un coussin gonflable. Un nourrisson ou un enfant trop petit pour utiliser une ceinture de sécurité doit être correctement attaché au moyen d'un siège de sécurité enfant. Lexus recommande vivement d'installer tous les nourrissons et enfants sur les sièges arrière du véhicule et de prévoir pour eux des systèmes de retenue adaptés. Les sièges arrière sont plus sûrs pour les nourrissons et les enfants que le siège du passager avant.

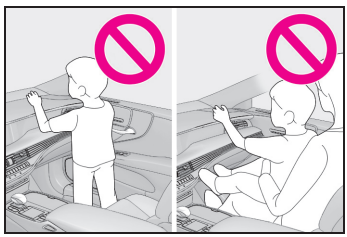
- N'installez jamais un siège de sécurité enfant type dos à la route sur le siège passager avant, même si le témoin indicateur “AIR BAG OFF” est allumé. En cas d'accident, la force engendrée par le déploiement rapide du coussin gonflable du passager avant peut blesser grièvement, voire tuer l'enfant si le siège de sécurité enfant type dos à la route est installé sur le siège du passager avant.

- Ne vous asseyez pas sur le bord du siège et ne vous appuyez pas contre la planche de bord.



AVERTISSEMENT

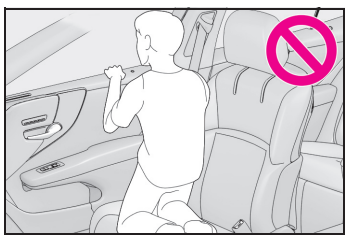
- Ne laissez pas un enfant rester debout devant le coussin gonflable passager avant SRS ou s'asseoir sur les genoux du passager avant.
- Les occupants des sièges avant ne doivent en aucun cas tenir d'objets sur leurs genoux.



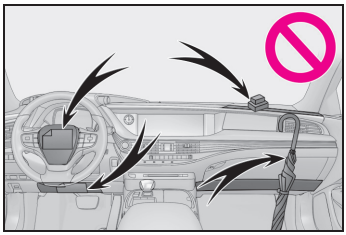
- Ne vous appuyez pas contre la porte, le rail latéral de toit ou les montants avant, latéraux ou arrière.



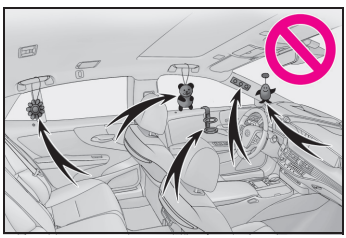
- Ne laissez personne s'agenouiller sur un siège en appui contre la porte ou sortir la tête ou les mains à l'extérieur du véhicule.



- Ne fixez rien et ne posez rien sur des emplacements tels que la planche de bord, la garniture du volant et la partie inférieure du tableau de bord.



- Ne fixez rien à des emplacements tels que les portes, la vitre du pare-brise, les vitres latérales, les montants avant ou arrière, des rails latéraux de toit et des poignées de maintien.



- Ne suspendez aucun cintre ou objet dur aux crochets à vêtements. Ces éléments peuvent se transformer en projectiles si les coussins gonflables rideaux SRS se déploient, le choc pouvant entraîner des blessures graves, voire mortelles.
- Si un cache en vinyle est fixé sur la zone où le coussin gonflable de genoux SRS se déploie, veillez à le retirer.

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- N'utilisez aucun accessoire de siège recouvrant les zones de déploiement des coussins gonflables SRS, car il risque de gêner le déploiement des coussins gonflables SRS. De tels accessoires peuvent empêcher les coussins gonflables SRS de se déployer correctement, peuvent désactiver le système ou entraîner le déploiement involontaire des coussins gonflables SRS, ce qui peut éventuellement occasionner des blessures graves, voire mortelles.
- Évitez de faire subir des chocs ou des pressions excessives aux composants des systèmes de coussins gonflables SRS, aux portes avant ou à leur zone adjacente.
  En effet, cela pourrait entraîner un dysfonctionnement des coussins gonflables SRS.
- Ne touchez aucun composant des coussins gonflables SRS immédiatement après leur déploiement (gonflage), car ils peuvent être chauds.
- Si vous avez des difficultés à respirer après le déploiement des coussins gonflables SRS, ouvrez une porte ou une vitre pour faire entrer de l'air frais, ou bien descendez du véhicule si cela ne présente pas de danger. Essuyez tout résidu dès que possible afin d'éviter d'éventuelles irritations de la peau.
- Si une zone renfermant un coussin gonflable SRS est endommagée ou craquelée, faites-la remplacer par votre concessionnaire Lexus.
- Ne placez rien sur le siège du passager avant, comme un coussin par exemple. Cela a pour conséquence de répartir le poids du passager sur toute la surface du siège, ce qui empêche le capteur de détecter correctement le poids du passager. En conséquence, les coussins gonflables frontaux SRS du siège du passager avant risquent de ne pas se déployer en cas de collision.

Modification et mise au rebut des composants du système de coussins gonflables SRS

Ne mettez pas votre véhicule au rebut et ne procédez à aucune des modifications suivantes sans consulter votre concessionnaire Lexus. Les coussins gonflables SRS peuvent ne pas fonctionner correctement ou se déployer involontairement, ce qui peut provoquer des blessures graves, voire mortelles.

- Dépose, repose, démontage ou réparation des coussins gonflables SRS
- Réparation, dépose ou modification des pièces suivantes ou de leurs alentours
  - Volant
  - Tableau de bord
  - Planche de bord
  - Sièges
  - Garnissage des sièges
  - Montants avant
  - Montants latéraux
  - Montants arrière
  - Rails latéraux de toit
  - Panneaux de portes avant
  - Garniture de porte avant
  - Haut-parleurs de porte avant

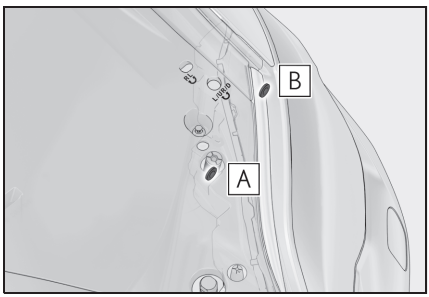
AVERTISSEMENT

- Modifications des panneaux de portes avant (par exemple, perçage de trous dans les panneaux)
- Réparation ou modification des pièces suivantes ou de leurs alentours
  - Aile avant
  - Pare-chocs avant
  - Côtés de l'intérieur du véhicule
- Installation des pièces suivantes ou accessoires
  - Pare-buffle ou pare-kangourou
  - Chasse-neige
  - Treuils
  - Porte-bagages de toit
- Modifications de la suspension du véhicule
- Installation d'appareils électroniques tels que les émetteurs/récepteurs radios mobiles et les lecteurs CD
- Modifications apportées à votre véhicule pour les personnes atteintes d'un handicap physique

Headlight aim instructions for Canadian owners (in French)

The following is a French explanation of headlight aim instructions from the headlight aim section in this manual.

Boulons de réglage du mouvement vertical



A Boulon de réglage A

B Boulon de réglage B

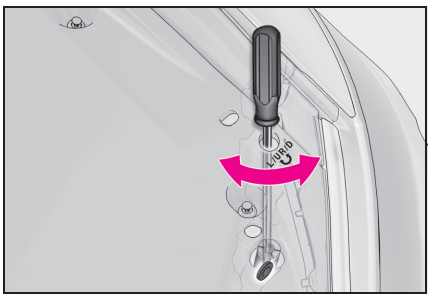
Avant de vérifier le réglage des phares

1. Vérifiez que le réservoir de carburant du véhicule est plein et que la zone autour des phares n'est pas déformée.
2. Stationnez le véhicule sur une surface plane.
3. Installez-vous dans le siège conducteur.
4. Balancez le véhicule plusieurs fois.

Réglage du faisceau des phares

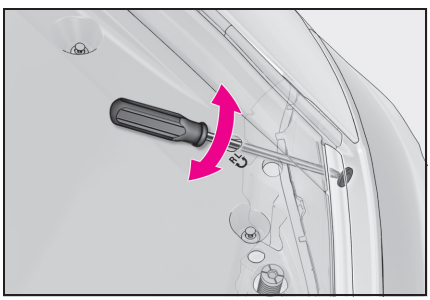
1 À l'aide d'un tournevis cruciforme, tournez le boulon A dans n'importe quel sens.

Mémorisez le sens dans lequel vous avez tourné et le nombre de tours.



2 Tournez le boulon B du même nombre de tours dans le même sens qu'à l'étape **1**.

Si vous n'arrivez pas à régler le phare en procédant de la sorte, confiez le véhicule à votre concessionnaire Lexus pour qu'il règle le faisceau des phares.



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What to do if... (Troubleshooting)

If you have a problem, check the following before contacting your Lexus dealer.

The doors cannot be locked, unlocked, opened or closed



You lose your keys

- If you lose your mechanical keys, new genuine mechanical keys can be made by your Lexus dealer. (→P.474)
- If you lose your electronic keys, the risk of vehicle theft increases significantly. Contact your Lexus dealer immediately. (→P.474)



The electronic key does not operate properly

- Is the electronic key battery weak or depleted? (→P.439)



The doors cannot be locked or unlocked

- Is the engine switch in IGNITION ON mode?

When locking the doors, turn the engine switch off. (→P.171)

- Is the electronic key left inside the vehicle?

When locking the doors, make sure that you have the electronic key on your person.

- The function may not operate properly due to the condition of the radio wave. (→P.110)



The rear door cannot be opened

- Is the child-protector lock set?

The rear door cannot be opened from inside the vehicle when the lock is set. Open the rear door from outside and then unlock the child-protector lock. (→P.100)



The trunk lid is closed with the electronic key left inside

- The function to prevent the electronic key from being left inside the trunk will operate and you can open the trunk as usual. Take the key out from the trunk. (→P.105)

If you think something is wrong



The engine does not start

- Did you press the engine switch while firmly depressing the brake pedal? (→P.169)
- Is the electronic key anywhere detectable inside the vehicle? (→P.109)
- Is the electronic key battery weak or depleted?

In this case, the engine can be started in a temporary way. (→P.477)

- Is the battery discharged? (→P.478)



The windows do not open or close by operating the power window switches

- Is the window lock switch pressed?

The power window except for the one at the driver's seat cannot be operated if the window lock switch is pressed. (→P.148)



The engine switch is turned off automatically

- The auto power off function will be operated if the vehicle is left in ACCESSORY mode for a period of time. (→P.172)



A warning buzzer sounds during driving

- The seat belt reminder light is flashing

Are the driver and the passengers wearing the seat belts? (→P.460)

- The parking brake indicator is on

Is the parking brake released? (→P.180)

Depending on the situation, other types of warning buzzer may also sound. (→P.457, 467)



An alarm is activated and the horn sounds

- Did anyone inside the vehicle open a door during setting the alarm?

The sensor detects it and the alarm sounds. (→P.62)

Do one of the following to deactivate or stop the alarms:

- Except for Canada: Unlock the doors.
- Except for Canada: Open the trunk.
- For Canada: Unlock the doors or open the trunk using the entry function or wireless remote control.
- Turn the engine switch to ACCESSORY or IGNITION ON mode, or start the engine. (The alarm will be deactivated or stopped after a few seconds.)



A warning buzzer sounds when leaving the vehicle

- Is the message displayed on the multi-information display?

Check the message on the multi-information display. (→P.467)



A warning light turns on or a warning message is displayed

- When a warning light turns on or a warning message is displayed, refer to P.457, 467.

When a problem has occurred



If you have a flat tire

- Slow down the vehicle, drive with extra caution, and take your vehicle

to the nearest Lexus dealer or authorized tire dealer as soon as possible to have the tire replaced. (→P.472)



The vehicle becomes stuck

- Try the procedure for when the vehicle becomes stuck in mud, dirt, or snow. (→P.487)

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For information regarding the equipment listed below, refer to the "MULTIMEDIA OWNER'S MANUAL".

- Navigation system
- Audio/visual system
- Rear seat entertainment system
- Panoramic view monitor
- Lexus parking assist monitor

Certifications

▶ Safety Connect

FCC ID : BEJTL21BNN

This device complies with part 15 of the FCC Rules and RSS-Gen of IC Rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the manufacturer (or party responsible) for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC RF Radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body

IC : 2703H-TL21BNN

IC Radiation Exposure Statement:
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment.
This equipment should be installed and operated with minimum distance 20 cm between the
radiator & your body.

Operation is subject to the following two conditions:
(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

IC : 2703H-TL21BNN

Avis d'Industrie Canada sur l'exposition aux rayonnements
Cet appareil est conforme aux limites d'exposition aux rayonnements d'Industrie Canada pour un environment non contrôlé.
Il doit être installé de façon à garder une distance minimale de 20 centimétres entre la source de rayonnements et votre corps.

L'exploitation est autorisée aux deux conditions suivantes :
1.L'appareil ne doit pas produire de brouillage;
2.L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

REMARQUE: LE FABRICANT N'EST PAS RESPONSABLE DES INTERFÉRENCES RADIOÉ LECTRIQUES CAUSÉES PAR DES MODIFICATIONS NON AUTORISÉES APPORTÉES À CET APPAREIL. DE TELLES MODIFICATIONS POURRAIT ANNULER L'AUTORISATION ACCORDÉE À L'UTILISATEUR DE FAIRE FONCTIONNER L'APPAREIL.

▶ Engine immobilizer system

FCC ID : NI4TMIMB-3

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC ID: NI4TMLF19D-5 US

NOTE

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

95

NOTE CA

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device. 811

NOTE CA

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) L'appareil ne doit pas produire de brouillage;

(2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement. 811

US

FCC ID:HYQ17EAA

NOTE

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CAUTION : Radio Frequency Radiation Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body.

Co-location: This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

00

CA

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

The antenna cannot be removed (and changed) by user.

Co-location: This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

CAUTION: Radio Frequency Radiation Exposure
This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the ISED radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20 cm or more away from person's body.

02

CA

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
(1) L'appareil ne doit pas produire de brouillage;
(2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

L'utilisateur n'est pas autorisé à retirer (ou modifier) l'antenne.

Emplacement : Cet émetteur ne doit pas être installé ou utilisé conjointement avec d'autres antennes ou émetteurs.

ATTENTION : exposition aux radiofréquences
Cet équipement est conforme aux limites d'exposition aux rayonnements d'ISDE établies pour un environnement non contrôlé ainsi que la norme CNR-102 de la réglementation d'ISDE relative à l'exposition aux radiofréquences (RF). Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et le corps.

03

▶ Smart access system with push-button start

FCC ID : NI4TMLF15-1

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC ID:HYQ23ABY
FCC ID:HYQ14FBZ
FCC ID:HYQ14CBM

NOTE:
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC WARNING:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

<For 14FBZ>
The FCC ID is affixed inside the equipment. You can find the ID when replacing the battery.

US

FCC ID:HYQ23ABY
FCC ID:HYQ14FLC
FCC ID:HYQ14CBP

NOTE:
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC WARNING:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

<For 14FLC>
The FCC ID is affixed inside the equipment. You can find the ID when replacing the battery.

00

CA

NOTE:
This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).
Operation is subject to the following two conditions:
(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

<For 14FLC>
The IC Certification number is affixed inside the equipment. You can find the number when replacing the battery.

02

CA

NOTE:
L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.
L'exploitation est autorisée aux deux conditions suivantes :
(1) L'appareil ne doit pas produire de brouillage;
(2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

<Pour 14FLC>
Le numéro d'accréditation IC est apposé à l'intérieur de l'appareil. Ce numéro est visible au remplacement de la pile.

03

▶ Millimeter wave radar sensor

FCC ID: HYQDNMWR009

D09 US 01

NOTE:
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC WARNING:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

US 01

Radiofrequency radiation exposure Information:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator (antenna) and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

US 02

NOTE:
This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the ISED radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20 cm or more away from person's body.

CA 01

NOTE:
L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
(1) L'appareil ne doit pas produire de brouillage;
(2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'ISDE. Cet équipement doit être installé et utilisé en gardant une distance de 20 cm ou plus entre le dispositif rayonnant et le corps.

CA 02

FCC ID: HYQDNMWR011

D11 US 01

NOTE:
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC WARNING:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

US 01

Radiofrequency radiation exposure Information:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator (antenna) and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

US 02

NOTE:
This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the ISED radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20 cm or more away from person's body.

CA 01

NOTE:
L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
(1) L'appareil ne doit pas produire de brouillage;
(2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'ISDE. Cet équipement doit être installé et utilisé en gardant une distance de 20 cm ou plus entre le dispositif rayonnant et le corps.

CA 02

▶ BSM (Blind Spot Monitor)

FCC ID : OAYSRR3A

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Warning
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

C3-002

Radiofrequency radiation exposure Information:
This equipment complies with FCC and IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Notice:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

C5-002

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Radiofrequency radiation exposure information:
This equipment complies with radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

C5-003

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) L'appareil ne doit pas produire de brouillage;
(2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Informations sur l'exposition aux rayonnements radiofréquences:
Cet équipement est conforme aux limites d'exposition aux rayonnements définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

C5-004

▶ Intuitive parking assist

Product name : Intuitive parking assist
Compliance statement : This device complies with part 18 of the FCC Rules.
Responsible Party : DENSO International America, Inc.
24777 Denso Drive, Southfield Michigan 48033 U.S.A.
https://www.denso.com/us-ca/en/about-us/company-information/us/diam/

This ISM device complies with Canadian ICES-001.

Cet appareil ISM est conforme à la norme NMB-001 du Canada.

▶ Garage door opener

This device complies with FCC rules part 15 and Innovation, Science, and Economic Development Canada RSS-210. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference that may be received including interference that may cause undesired operation. WARNING: The transmitter has been tested and complies with FCC and ISED rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

This equipment complies with FCC and ISED radiation exposure limits set forth for an uncontrolled environment. End Users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must be at least 20 cm from the user and must not be co-located or operating in conjunction with any other antenna or transmitter.

This device complies with FCC rules part 15 and Innovation, Science, and Economic Development Canada RSS-210. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference that may be received including interference that may cause undesired operation. WARNING: The transmitter has been tested and complies with FCC and ISED rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

This equipment complies with FCC and ISED radiation exposure limits set forth for an uncontrolled environment. End Users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must be at least 20 cm from the user and must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet appareil est conforme aux règlements de la FCC, section 15, et au CNR-210 d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est assujetti aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférences nuisibles et (2) cet appareil doit accepter toute interférence reçue, y compris celle qui pourrait entraîner un dysfonctionnement. MISE EN GARDE : L'émetteur a subi des tests et est conforme aux règlements de la FCC et d'ISDE. Les changements ou modifications non approuvés explicitement par la partie responsable de la conformité pourraient rendre caduque l'autorisation de l'utilisateur de se servir du dispositif.

Cet appareil est conforme aux limites d'exposition aux radiations de la FCC et d'ISDE établies pour un environnement non contrôlé. Les utilisateurs finaux doivent respecter les instructions d'utilisation spécifiques pour satisfaire aux exigences de conformité aux expositions de RF. L'émetteur doit se trouver à 20 cm au minimum de l'utilisateur et ne doit pas être situé au même endroit que tout autre émetteur ou antenne ni fonctionner avec un autre émetteur ou antenne.

▶ Tire pressure warning system

FCC ID: PAXPMVE000

NOTE

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC ID: PAXPMVE100

NOTE

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user' s authority to operate the equipment.

NOTE

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

NOTE

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioé lectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

"Perchlorate Material – special handling may apply, See www.dtsc.ca.gov/hazardouswaste/perchlorate."

▶ Wireless charger

FCC ID：ACJ932AT2301

NOTE:
This device complies with part 15 and part 18 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC CAUTION
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.This equipment has been tested and found to comply with the limits for a wireless power charger, pursuant to part 18 of the FCC Rules.This equipment generates, uses and can radiate radio frequency energy and,
if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.If this equipment does cause harmful interference to radio communications,which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person s body.

NOTE:
This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause interference. (2) This device must accept any interference, including interference that may cause undesired operation of the device.

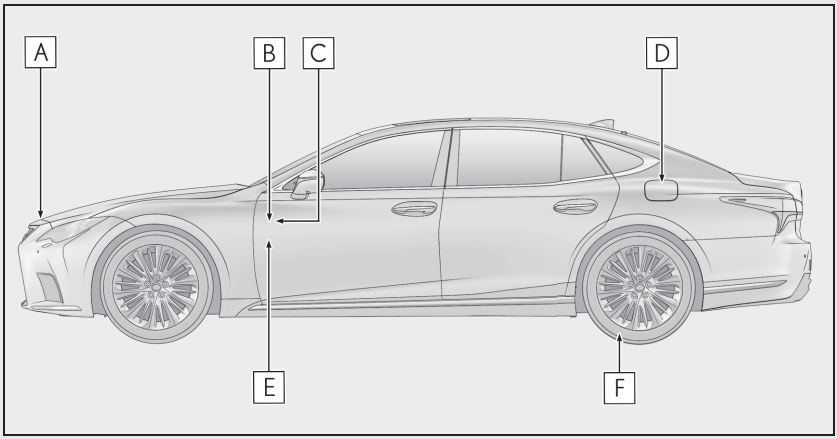
L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
1) L'appareil ne doit pas produire de brouillage;
2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

CAUTION:
This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the ISED radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body.

Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'ISDE.
Cet équipement doit être installé et utilisé en gardant une distance de 20 cm ou plus entre le radiateur et le corps humain.

The "Qi" logo is a trademark of the Wireless Power Consortium.

GAS STATION INFORMATION



A Auxiliary catch lever (→P.407)

B Trunk opener (→P.103)

C Fuel filler door opener (→P.194)

D Fuel filler door (→P.194)

E Hood lock release lever (→P.407)

F Tire inflation pressure (→P.496)

Fuel tank capacity (Reference)	21.7 gal. (82.0 L, 18.0 Imp. gal.)	
Fuel type	Unleaded gasoline only	P.491 P.499
Cold tire inflation pressure		P.496
Engine oil capacity (Drain and refill — reference)		P.492
Engine oil type		P.492

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